



**BID
FOR**

**INFRASTRUCTURE - REPLACEMENT OF DOORS,
FRAMES AND PANIC HARDWARE, Phase II**

Bid Opening: June 22, 2010

Grambling State University
Purchasing Department
403 Main Street
Old President's Residence
Grambling, LA 71245

OWNER
GRAMBLING STATE UNIVERSITY
FACILITIES MANAGEMENT & CAMPUS SERVICES
P. O. Box 563
Grambling, LA 71245
Front Desk: 318-274-6162

PROJECT MANUAL
TABLE OF CONTENTS
DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

00 01 01 Project Title
00 01 10 Project Manual Table of Contents
00 21 13 Instructions to Bidders
00 22 13 Supplementary Instructions to Bidders
00 41 13 Form of Bid – Stipulated Sum
00 43 13 Bid Security Form
00 61 13.13 Performance
00 61 13.16 Payment Bond
00 72 13 General Conditions of the Contract
00 73 00 Supplementary Conditions

DIVISION 01 - GENERAL REQUIREMENTS

01 11 00 Summary of the Work
01 29 73 Schedule of Values
01 31 19 Project Meetings
01 33 23 Shop Drawings, Product Data and Samples
01 42 15 Definitions and Standards
01 50 00 Temporary Facilities and Controls
01 61 00 Material and Equipment
01 62 00 Substitutions and Product Options
01 70 10 Project Closeout Requirements
01 71 23.11 Grades, Lines and Levels
01 73 29 Cutting and Patching
01 74 00 Cleaning and Waste Management
01 78 00 Closeout Submittals 5

DIVISION 02 - EXISTING CONDITIONS

02 41 19.13 Selective Building Demolition

DIVISION 03 – CONCRETE

No Work in this Project

DIVISION 04 – MASONRY

No Work in this Project

DIVISION 05 – METALS

No Work in this Project

DIVISION 06 - WOOD, PLASTIC AND COMPOSITES

No Work in this Project

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

No Work in this Project

DIVISION 08 – OPENINGS

08 11 17 Monumental Stile and Rail Door 7
08 17 43 Integrated Composite Door Assemblies 9
08 71 00 Door Hardware 13
08 80 00 Glazing 5

DIVISION 09 – FINISHES

No Work in this Project

DIVISION 10 – SPECIALTIES

No Work in this Project

DIVISION 11 - EQUIPMENT

No Work in this Project

DIVISION 12 - FURNISHINGS

No Work in this Project

DIVISION 13 - SPECIAL CONSTRUCTION

No Work in this Project

DIVISION 14 - CONVEYING SYSTEMS

No Work in this Project

DIVISION 15 - RESERVED FOR FUTURE EXPANSION

DIVISION 16 - RESERVED FOR FUTURE EXPANSION

DIVISION 17 - RESERVED FOR FUTURE EXPANSION

DIVISION 18 - RESERVED FOR FUTURE EXPANSION

DIVISION 19 - RESERVED FOR FUTURE EXPANSION

DIVISION 20 - RESERVED FOR FUTURE EXPANSION

DIVISION 21 - FIRE SUPPRESSION

No Work in this Project

DIVISION 22 - PLUMBING

No Work in this Project

DIVISION 23 - HVAC

No Work in this Project

DIVISION 26 - ELECTRICAL

No Work in this Project

DIVISION 27 - COMMUNICATIONS

No Work in this Project

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY-

No Work in this Project

DIVISION 29 - RESERVED FOR FUTURE EXPANSION

DIVISION 30 - RESERVED FOR FUTURE EXPANSION

DIVISION 31 - EARTHWORK

No Work in this Project

DIVISION 32 - EXTERIOR IMPROVEMENTS

No Work in this Project

DIVISION 33 - UTILITIES

No Work in this Project

DIVISION 34 - TRANSPORTATION

No Work in this Project

DIVISION 35 - WATERWAY AND MARINE CONSTRUCTION

No Work in this Project

DIVISION 36 - RESERVED FOR FUTURE EXPANSION

DIVISION 37 - RESERVED FOR FUTURE EXPANSION

DIVISION 38 - RESERVED FOR FUTURE EXPANSION

DIVISION 39 - RESERVED FOR FUTURE EXPANSION

DIVISION 40 - PROCESS INTERGRATION

No Work in this Project

DIVISION 41 - MATERIAL PROCESSING AND HANDLING EQUIPMENT

No Work in this Project

DIVISION 42 - PROCESS HEATING, COOLING AND DRYING EQUIPMENT

No Work in this Project

DIVISION 43 - PROCESS GAS AND LIQUID HANDLING EQUIPMENT

No Work in this Project

DIVISION 44 - POLLUTION CONTROL EQUIPMENT

No Work in this Project

DIVISION 45 - INDUSTRY SPECIFIC MANUFACTURING EQUIPMENT

No Work in this Project

DIVISION 46 - RESERVED FOR FUTURE EXPANSION

DIVISION 47 - RESERVED FOR FUTURE EXPANSION

DIVISION 48 - ELECTRICAL POWER GENERATION

No Work in this Project

DIVISION 49 - RESERVED FOR FUTURE EXPANSION

* * * * *

End of Table of Contents

DIVISION 00 SECTION 00 21 13 - INSTRUCTIONS TO BIDDERS

GENERAL

GOVERNING STANDARD AIA DOCUMENTS

The American Institute of Architects (AIA) "Instructions to Bidders", AIA Document Number A-701, Fourth Edition, dated 1997; Articles 1 through 8 inclusive, consisting of five (5) printed pages; are hereby incorporated into and made as much a part of this Project Manual as if bound herein. A copy of the AIA A-701 "Instructions to Bidders" is on file at the office and may be examined in that office.

* * * * *

End of Section 00 21 13

DIVISION 00 SECTION 00 22 13 - SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

GENERAL

REFERENCE DOCUMENT:

General: The American Institute of Architects (AIA) "Instructions to Bidders", AIA Document Number A-701, Fourth Edition, dated 1997; Articles 1 through 8 inclusive, consisting of five (5) printed pages; are hereby incorporated into and made as much a part of this Project Manual as if bound herein. A copy of the AIA A-701 "Instructions to Bidders" is on file at the office of the Architect and may be examined in that office.

Note: Bidders must comply with the following additional instructions.

SUPPLEMENTARY INSTRUCTIONS

BIDDERS

Contractor: Bids of \$50,000.00 or more will be considered only when the Contractor certifies that he holds a current valid Louisiana License of proper classification and shows his license number on the bid above his signature as required under R. S. 37:2151-2163. Contractors desiring to bid shall submit to Owner evidence that they hold license of proper classification and in full force and effect.

Owner: The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

Notice: Conditional bids will not be accepted.

BIDS

Forms: Bids must be submitted sealed and on forms furnished by Owner.

Bid Envelope: Contractor's state license number must appear on the outside of sealed bid envelope. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as hereinafter specified.

BID BOND

General: Each bid must be accompanied by a Certified Check or Bid Bond in the sum of not less than five per cent (5%) of bid, made payable to Owner; said check or bond to warranty that Bidder will enter into Contract for execution of this Work, in case same is awarded to him. If said bidder fails to furnish necessary Performance Bond and enter into Contract to execute the Work as described in the drawings and Project Manual, this check will be forfeited to Owner as liquidated damages.

Bid Bond Return: Bid Bonds will be returned to all except the three (3) lowest bidders within three (3) days after the opening of bids, and the remaining bid bonds will be returned promptly after the Owner and the accepted bidder have executed the Contract, or, if no award has been made within thirty (30) days after the date of the opening of the bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

Note: The successful bidder, upon his failure or refusal to execute and deliver the Contract and Bonds required within ten (10) days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the bid bonds deposited with his bid.

BULLETINS & ADDENDA

General: Each Bid must be accompanied by copies of all Bulletins or Addenda issued by Owner. Each addendum must be signed by bidder, acknowledging that the addendum is considered a part of the Drawings and Project Manual and, as such, is included in his bid.

EXAMINATION OF SITE

General: Bidders are requested to visit site or building, compare drawings and specifications with any Work in place, and inform themselves of all conditions, including other Work, if any, being performed.

Notice: Failure to visit site will in no way relieve successful bidder from necessity of furnishing any material or performing any Work that may be required to complete Work in accordance with drawings and specifications without additional cost to Owner. Any additional work required to complete the Work of the Project in accordance with Drawings and Specifications shall be done so without additional cost to the Owner.

PRE-BID CONFERENCE

Time and Place: A **Mandatory** Pre-Bid Conference will be held at June 8, 2010 at 2:00 p.m. at the Purchasing Office of Grambling State University

BID OPENING

Time and Place: Sealed bids for the construction of **INFRASTRUCTURE - REPLACEMENT OF DOORS, FRAMES AND PANIC HARDWARE, GRAMBLING STATE UNIVERSITY, GRAMBLING, LOUISIANA, PROJECT NO. 19-623, SCHEDULE: 01-107-06B-11, ITEM NUMBER 2, Phase 2** until 2:00 p.m., June 22, 2010 at the Purchasing Department on the campus of Grambling State University which is located at 403 Main Street, Grambling, Louisiana.

Notice: Any Bid may be withdrawn prior to the closing time; no bids may be withdrawn within thirty (30) days after scheduled closing time for receipt of bids.

Bulletins and Addenda: Bids must be submitted with Bid Bond and Addenda as heretofore mentioned.

Note: Contractor's state license number must appear on the outside of sealed bid envelope as heretofore mentioned.

DISTRIBUTION OF BIDDING DOCUMENTS

USE OF SEPARATE FORMS

General: Any Bid Forms or contract forms bound herein are for the convenience of bidders, and are not to be detached, filled out or executed. Separate copies will be furnished for that purpose.

PERFORMANCE AND PAYMENT BOND, EXECUTION OF CONTRACT

General: Bidders attention is called to the Performance Bond and Execution of Contract

requirements set forth in the Conditions of the Contract of this Project Manual.

MODIFICATION OF BIDS

Notice: No sealed bids may be modified or changed in any manner.

Bids: Bids may be submitted just prior to closing time for receipt of same as heretofore stated, and at place of opening as heretofore stated.

General: Bids received prior to scheduled closing time will be securely kept, unopened. The officer whose duty it is to open them will decide when specified time has arrived; any bid received thereafter will not be considered and will be returned unopened. No responsibility will attach to an officer for the premature opening of a bid not properly addressed and identified. Neither the Owner nor the Architect assumes any responsibility in regard to delivery of bids.

Attachments: Bids must be submitted with Bid Bond and Addenda as heretofore stated.

Note: Owner reserves the right to waive irregularities and to reject bids.

* * * * *

End of Section 00 22 13

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: _____

(Owner to provide name and address of owner)

BID FOR: Infrastructure – Replacement of Doors,

Frames and Panic Hardware, Phase II

(Owner to provide name of project and other identifying information)

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Facilities Management and Campus Services and dated: May 19, 2010

(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) _____

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated “Base Bid” * but not alternates) the sum of:

_____ Dollars (\$ _____)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

_____ Dollars (\$ _____)

Alternate No. 2 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

_____ Dollars (\$ _____)

Alternate No. 3 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

_____ Dollars (\$ _____)

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

LOUISIANA CONTRACTOR’S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____

DATE: _____

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** If someone other than a corporate officer signs for the Bidder/Contractor, a copy of a corporate resolution or other signature authorization shall be required for submission of bid. Failure to include a copy of the appropriate signature authorization, if required, may result in the rejection of the bid unless bidder has complied with La. R.S. 38:2212(A)(1)(c) or RS 38:2212(O) .

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA RS 38:2218.A is attached to and made a part of this bid.

DIVISION 00 SECTION 00 41 13 - FORM OF BID - STIPULATED SUM

To: GRAMBLING STATE UNIVERSITY

FACILITIES MANAGEMENT & CAMPUS SERVICES

P. O. Box 563
Grambling, LA 71245

Ladies and Gentlemen:

After having carefully examined the Drawings and Project Manual Specifications entitled:
**INFRASTRUCTURE - REPLACEMENT OF DOORS, FRAMES AND PANIC HARDWARE,
GRAMBLING STATE UNIVERSITY, GRAMBLING, LOUISIANA, PROJECT NO. 19-623,
SCHEDULE: 01-107-06B-11, ITEM NUMBER 2, Phase 2** Dated: _____

and having examined the site, undersigned agrees to execute the Work and Construction of same, according to said documents:

BASE BID

_____ (_____) Dollars

Successful bidder will be required to furnish Federal ID number. If undersigned is notified of proposal acceptance within thirty days after proposal date, he agrees to execute a Contract for above Work for above stated compensation, in form of American Institute of Architect's Standard Agreement. Undersigned agrees to warranty completion of Work within **90** calendar days from date of Contract. Undersigned certifies that he holds a current valid Louisiana State License of proper classification
My license number is _____.

By: _____

NOTE

1. Refer to Section 00 22 13 - "Supplementary Instructions To Bidders" for complete information.
2. License number should also be shown on outside of sealed bid envelope.
3. Amounts shall be shown in both words and figures. In case of a discrepancy the amount shown in words shall govern.
4. In these specifications, "Architect" and "Owner" are one and the same
5. Owner is Grambling State University and or his representative.

DIVISION 00 SECTION 00 43 13 - BID SECURITY FORM

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned,

_____ as Principal, and _____
_____ as Surety, are hereby held and firmly
bound unto the **GRAMBLING STATE UNIVERSITY, GRAMBLING, LOUISIANA** as **OWNER** in
the penal sum of _____ Dollars
(\$_____). for the payment of which, well and truly to be made, we hereby jointly and
severally bind ourselves, successors and assigns. Signed, this ____ day of _____,
2010.

This Condition of the above obligation is such that whereas the Principal has submitted to the
Grambling State University, Grambling, Louisiana a certain Bid attached hereto and
hereby made a part hereof to enter into a contract in writing for the **CONSTRUCTION OF:**
INFRASTRUCTURE - REPLACEMENT OF DOORS, FRAMES AND PANIC HARDWARE,
GRAMBLING STATE UNIVERSITY, GRAMBLING, LOUISIANA, PROJECT NO. 19-623,
SCHEDULE: 01-107-06B-11, ITEM NUMBER 2, Phase 2
NOW THEREFORE.

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the
Form of Contract attached hereto (properly completed in accordance with said Bid) and
shall furnish a bond for his faithful performance of said contract, and for the payment of
all persons performing labor or furnishing materials in connection therewith, and shall be
in all other respects perform the agreement created by the acceptance of said Bid, then
this obligation shall be void, otherwise the same remain in force and effect; it being
expressly understood and agreed that the liability of the Surety for any and all claims
hereunder shall in no event exceed the penal amount of this obligation as herein stated.
The Surety, for value received, hereby stipulates and agrees that the obligation of said
Surety and its bond shall be in no way impaired or affected by any extension of the time
within which the OWNER may accept such Bid; and said Surety does hereby waive
notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunder set their hands and
seals, and such of them as are corporations have caused their corporate seals to be hereto
affixed and these presents to be signed by their proper officers, the day and year first set forth
above.

_____ (L.S.) Principal

By: _____ (L.S.) Surety

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's
most current list (Circular 570 as amended) and be authorized to transact business in the State
of Louisiana.

DIVISION 00 SECTION 00 61 13.13 - PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS: that _____
_____, a _____, hereinafter called Principal, and
_____, hereinafter called Surety, are held and firmly bound unto
the **GRAMBLING STATE UNIVERSITY, GRAMBLING, LOUISIANA**, hereinafter called
Owner, in the total aggregate penal sum of _____ Dollars
(\$_____), in lawful money of the United States, for the payment of which sum well
and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and
assigns, jointly and severally, firmly by these presents.
THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered
into a certain contract with the OWNER, dated the ____ day of _____ 2010,
a copy of which is hereto attached and made a part hereof for the construction of
**INFRASTRUCTURE - REPLACEMENT OF DOORS, FRAMES AND PANIC
HARDWARE, GRAMBLING STATE UNIVERSITY, GRAMBLING, LOUISIANA, PROJECT
NO. 19-623, SCHEDULE: 01-107-06B-11, ITEM NUMBER 2, Phase 2**
in accordance with plans and specifications issued.

NOW THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the
undertakings, covenants, terms, conditions, and agreements of said contract during the original
term thereof, and any extensions thereof which may be granted by the OWNER, or
GOVERNMENT, with or without notice to the SURETY and during the one year guaranty period
and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and
shall fully indemnify and save harmless the OWNER and GOVERNMENT from all costs and
damages which it may suffer by reason of failure to do so, and shall reimburse and repay the
OWNER and GOVERNMENT all outlay and expense which the OWNER and GOVERNMENT
may incur in making good any default, then this obligation shall be void, otherwise to remain in
full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees
that no change, extension of time, alteration or addition to the terms of the contract or to WORK
to be performed there under or the SPECIFICATIONS accompanying same shall in any way
affect its obligation on this BOND, and it does hereby waive notice of any such change,
extension of time, alteration or addition to the terms of the contract or to the WORK or to the
SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended
automatically and immediately, without formal and separate amendments hereto, upon
amendment to the Contract not increasing the contract price more than 20 percent, so as to
bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as
so amended. The term "Amendment", wherever used in this BOND, and whether referring to
this BOND, the Contract or the Loan Documents shall include any alteration, addition,
extension, or modification of any character whatsoever.

PROVIDED FURTHER, that no final settlement between the OWNER or GOVERNMENT and the PRINCIPAL shall abridge the right of the other beneficiary hereunder, whose claim may be unsatisfied. The OWNER and GOVERNMENT are the only beneficiaries hereunder.

IN WITNESS WHEREOF, this instrument is executed in six (6) counterparts, each one of which shall be deemed an original, this the ____ day of _____, 2010.

ATTEST:

Principal

(Principal Secretary)
(SEAL)

BY _____

(Witness as to Principal) (Address)

(Address)

Surety
ATTEST:

(Witness as to Surety) Attorney-in-Fact

(Address) (Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is partnership, all partners should execute BOND.

IMPORTANT: Surety Companies executing BONDS must appear on the Treasury's Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Louisiana.

DIVISION 00 SECTION 00 61 13.16 - PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS: that _____, a _____, hereinafter called Principal, and _____, hereinafter called Surety, are held and firmly bound unto the **GRAMBLING STATE UNIVERSITY, GRAMBLING, LOUISIANA**, hereinafter called Owner, in the total aggregate penal sum of _____ Dollars (\$_____), in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the ____ day of _____ 2010, a copy of which is hereto attached and made a part hereof for the construction of **INFRASTRUCTURE - REPLACEMENT OF DOORS, FRAMES AND PANIC HARDWARE, GRAMBLING STATE UNIVERSITY, GRAMBLING, LOUISIANA, PROJECT NO. 19-623, SCHEDULE: 01-107-06B-11, ITEM NUMBER 2, Phase 2** in accordance with plans and specifications issued.

NOW THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modifications thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs or machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or materialman lienholder whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms, and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) Unless claimant, other than one having a direct contract with the PRINCIPAL shall have given written notice to any two of the following: The PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer. (b) After the expiration of one (1) year following the date of which PRINCIPAL

ceased work on said CONTRACT, is being understood, however, that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 percent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the Contract as so amended. The term "Amendment", wherever used in this BOND and whether referring to this BOND, the contract or the loan Documents shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied. WITNESS WHEREOF, this instrument is executed in six (6) counterparts, each of which shall be deemed an original, this the ____ day of _____ 2010.

ATTEST:

(Principal Secretary) Principal
(SEAL)
BY _____

(Address)

Witness as to Principal

(Address)

Surety
ATTEST:

Witness as to Surety Attorney-in-Fact

(Address) (Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is partnership, all partners should execute BOND.

IMPORTANT: Surety Companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Louisiana.

DIVISION 00 SECTION 00 72 13 - GENERAL CONDITIONS OF THE CONTRACT

GENERAL

GOVERNING STANDARD AIA DOCUMENT

General: The American Institute of Architects (AIA) "General Conditions of the Contract for Construction", AIA Document Number A-201, Fifteenth Edition dated, 1997; Articles 1 through 14 inclusive, consisting of forty-four (44) printed pages, are hereby incorporated into and made as much a part of this Project Manual as if bound herein. A copy of the AIA A-201 "General Conditions of the Contract for Construction" is on file at Grambling and may be examined in that office.

* * * * *

End of Section 00 72 13

DIVISION 00 SECTION 00 73 00 - SUPPLEMENTARY CONDITIONS

GENERAL

REFERENCE DOCUMENT

General: The following supplements modify the "General Conditions of the Contract for Construction," AIA Document A201, Fifteenth Edition, 1997. Where a portion of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

AMENDED PROVISIONS

General: Any article or articles of the above noted AIA General Condition document that are supplemental by the provisions of this Section, the original provisions of such General Condition articles shall remain in effect and the supplementary provisions shall be considered as added thereto. Any General Condition article or portion thereof that is amended, voided or changed by the provisions of this Section, the original provisions of such General Condition articles that are not specifically so amended, voided, or changed shall remain in full effect. If any provision of the Supplementary Conditions are at variance or conflict with the provisions of the General Conditions, the provisions of the Supplementary Conditions shall govern. The AIA "General Conditions of the Contract of Construction" and the Supplementary Conditions shall apply to all work in every Division and/or Section of the Project Manual Specifications.

ARTICLE 1: GENERAL PROVISIONS

Add the following subparagraph to Paragraph 1.1.2 The Contract:

- 1.1.2.1 Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful bidder shall execute and deliver to the Owner, a Contract in the form of the American Institute of Architect's Document A-101, Standard Form of Agreement Between Owner and Contractor, 1997 Edition. Copies of AIA Document A-101 may be examined or obtained at the Architect's office.

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

- 1.2.3 In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities.
1. The Agreement.
 2. Addenda, with those of later date having precedence over those of earlier date.
 3. The Supplementary Conditions.
 4. The General Conditions of the Contract for Construction.
 5. Drawings and Specifications.

Note: In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Owner interpretation.

Add following Paragraphs to Sub-article 1.2 CORRELATION AND INTENT OF THE CONTRACT

DOCUMENTS:

1.2.4 The Contractor shall provide all items, articles, materials, operations or methods listed, mentioned or scheduled either on the Drawings, or specified herein, or both, including all labor, materials, equipment and incidentals necessary and required for their completion.

1.2.5 Whenever the words "approved", "satisfactory", "directed", "submitted", "inspected", or similar words or phrases are used, it shall be assumed that the words "Architect or his representative" follows the verb as the object of the clause, such as "approved by the Architect or his representative".

1.2.6 All references to standard specifications or manufacturer's installation directions shall mean the latest edition thereof.

ARTICLE 2: OWNER

No Supplement.

ARTICLE 3: CONTRACTOR

Add following Paragraph to Subarticle 4.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES:

3.12.11 Contractor further agrees that if deviations, discrepancies, or conflict between shop drawings, samples, and product data and the Contract Documents in the form of Design Drawings and Specifications are discovered either prior to or after submittals are processed by the Architect, the Design Drawings and Specifications control and shall be followed.

ARTICLE 4: ADMINISTRATION OF THE CONTRACT

No Supplement.

ARTICLE 5: SUBCONTRACTORS

No Supplement.

ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

Add following subarticle 6.4:

6.4 RIGHT OF OCCUPANCY:

6.4.1 The Owner shall have the rights, without prejudice to any other rights under the Contract, to store or set in place within the buildings, furniture, fixtures, and equipment, and to occupy any one or all buildings, before acceptance of the Project as a whole, provided such occupancy or use does not interfere with the progress of the Work.

ARTICLE 7: CHANGES IN THE WORK

No Supplement.

ARTICLE 8: TIME

Add following Subarticle 8.4:

8.4 TIME OF COMPLETION (90 days from when material arrives on site)

8.4.1 Complete entire Project within time limits stated in Contractor's Bid, unless otherwise stipulated in Agreement.

ARTICLE 9: PAYMENTS AND COMPLETION

Add following Paragraph to Subarticle 9.3 APPLICATIONS FOR PAYMENT:

9.3.4 Agreement will provide that Contractor will be paid not more than 90% of estimated value of Work done, materials on site; payments to be made at intervals set forth in Agreement; remainder to be paid as described in Article 9 of the General Conditions of the Contract for Construction and as heretofore modified under this Section.

Add following Subparagraphs to Paragraph 9.8.1 under Subarticle 9.8 SUBSTANTIAL COMPLETION:

9.8.1.1 Upon Substantial Completion of the Work and on the recommendation of the the Owner shall accept the Work in accordance with the Certificate of Substantial Completion. The Owner shall sign the Certificate of Substantial Completion of the Work. The Contractor shall then cause the certificate to be "processed" in strict accordance with the respective State law and/or statute in effect at the date of Substantial Completion.

9.8.1.2 A complete release of all liens shall likewise then be presented to the Owner in strict compliance with State law and/or statute in effect at the date of Substantial Completion.
Add following Paragraph to Subarticle 9.8 SUBSTANTIAL COMPLETION:

9.8.3 The Contract and Bond shall be "processed" in strict accordance with respective State law and/or statute in effect at the date of Notice to Proceed. Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the Owner a release of liens as required in 9.8.1 above as well as any other certificates so required by respective State law and/or statute in effect at that time.

ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY

No Supplement.

ARTICLE 11: INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.1.1 Delete the semicolon at the end of Clause 11.1.1.1 and add: , including private entities, performing Work at the site and exempt from the coverage on account of number of employees or occupation, which entities shall maintain voluntary compensation coverage at the same limits specified for mandatory coverage for the duration of the Project;

11.1.1.2 Delete the semicolon at the end of Clause 11.1.1.2 and add:
or persons or entities excluded by statute from the requirements of Clause 11.1.1.1 but required by the Contract Documents to provide the insurance required by that Clause;

Add the following Subparagraphs:

- 11.1.1.9 Liability Insurance shall include all major divisions of coverage and be on a comprehensive basis including:
1. Premises Operations (including X, C and U coverages as applicable).
 2. Independent Contractors' Protective.
 3. Products and Completed Operations.
 4. Personal Injury Liability with Employment Exclusion deleted..
 5. Contractual, including specified provision for Contractor's obligation under Paragraph 3.18.
 6. Owned, non-owned and hired motor vehicles..
 7. Broad Form Property Damage including Completed Operations.

11.1.1.10 If the General Liability coverages are provided by a Commercial General Liability Policy on a claims-made basis, the policy date or Retroactive Date shall predate the Contract; the termination date of the policy or applicable extended reporting period shall be no earlier than the termination date of coverages required to be maintained after final payment, certified in accordance with Subparagraph 9.10.2.

Add following information to Paragraph 11.1.2 under Subarticle 11.1 CONTRACTOR'S LIABILITYINSURANCE:

Insurance shall be maintained with a reliable company (having at least "IV" or better financial rating and "A+" or better general policy holder's rating according to the latest A.M. Best report) of Contractor's choice, acceptable to, approved by Owner, authorized to do business in the state where project is located. Contractor shall require his subcontractors to carry like insurance (with adequate limits) to that referred to under this heading.

Add the following Clause 11.1.2.1 to 11.1.2

11.1.2.1 The insurance required by Subparagraph 11.1.1 shall be written for not less than the following limits, or greater if required by law:

1. Workmen's Compensation and Employer's Liability Insurance: Statutory workmen's compensation and occupational disease insurance covering Contractor's liability according to the laws of the states having jurisdiction; employer's liability insurance with minimum limits of \$100,000.00; policy extended to include waiver of subrogation to the Owner.
2. Comprehensive General Liability Insurance: For not less than the following limits of liability Bodily Injury: \$500,000.00 each occurrence \$500,000.00 aggregate Property Damage: \$250,000.00 each occurrence \$250,000.00 aggregate Include following coverage:
 - a. Completed Operations Coverage for not less than two (2) years.
 - b. Blanket Contractual Liability to cover indemnity agreement in accordance with Article 4.18 of the General Conditions of the Contract for Construction.
 - c. Waiver of all "XCU" exclusions.
 - d. Broad Form Property Damage and Personal Injury Liability.
 - e. Owner shall be named as additional insured.
3. Comprehensive Automobile Liability Insurance: For not less than the following limits of liability.

Bodily Injury \$ 500,000.00 each person \$1,000,000.00 each occurrence Property Damage \$ 100,000.00 each occurrence
Include Hired car and Non-Ownership Coverage. Owner shall be named as additional insured.

4. Excess Umbrella Policy: \$1,000,000.00 limit of liability. Owner shall be named as additional insured.

Add following Subparagraph to Paragraph 11.4.1 under Subarticle 11.4 PROPERTY

INSURANCE:

11.4.1.1 Builders Risk Insurance with extended coverage and "All Risk" coverage will be purchased, maintained by Owner as described in paragraph 11.3.1 of the General Conditions of the Contract for Construction. Contractor shall advise Owner of date on which Contract Work will commence so that Owner may obtain such insurance. Under Subarticle 11.4 PROPERTY INSURANCE; revise Paragraph 11.4.4 to read as follows:

11.4.4 The Owner shall file a Certificate of Insurance on all policies with the Contractor before exposure to loss may occur.

11.5 PERFORMANCE BOND AND PAYMENT BOND

Under Subarticle 11.5 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND; revise Paragraph 11.5.1 to read as follows:

11.5.1 The Contractor simultaneously with the signing of the Contract, agrees to furnish or, at the option of the Owner, agrees to permit the Owner to secure Bonds in the full amount of the Contract written by an underwriter satisfactory to the Owner. The Bonding Company shall have at least an A-XV rating or better by A.M. Best report unless otherwise approved by Owner. The Bond will warranty and condition for full complete and faithful performance of this Contract by the Contractor and for the payment of claims for labor performed or materials furnished in connection herewith, all in accordance with the terms of the Bond. The premium for the Bond will be paid by the Owner. In order to facilitate the securing of such Bonds, the Contractor agrees to sign the required application prior to the execution of the Contract and furnish a financial statement and other information and such financial warranties as are necessary for the securing of said Bonds. A copy of the application form may be examined or obtained at the office of the GSU.

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

No Supplement.

ARTICLE 13: MISCELLANEOUS PROVISIONS

No Supplement.

ARTICLE 14: TERMINATION OR SUSPENSION OF THE CONTRACT

No Supplement.

End of Section 00 73 00

DIVISION 01 SECTION 01 11 00 - SUMMARY OF THE WORK

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

PROJECT IDENTIFICATION

General: Infrastructure – Replacement of Doors, Frames and Panic Hardware, Phase II

RELATED REQUIREMENTS

General: Following related requirements are included in other sections:

A. Additional Requirements of all Parties to Contract: Section 00700 and Section 00800

CONTRACTS

General Contract: Construct Work of this Project under a single fixed-price Contract.

WORK SEQUENCE

General: Construct Work in a sequence to accommodate Owner's partial use of premises during construction period; coordinate construction schedule and operations with Architect and Owner.

CONTRACTOR'S USE OF PREMISES

Storage: Contractor assume full responsibility for protection and safekeeping of products under this Contract and stored on Project site. Contractor move any stored products, under this Contractor's control, which interfere with operations of Owner and/or separate contractor.

Additional Storage: Contractor shall obtain and pay for use of additional storage or work areas needed for construction operations.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION - (Not Applicable)

* * * * *

End of Section 01 11 00

DIVISION 01 SECTION 01 29 73 - SCHEDULE OF VALUES

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiation Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications shall apply to the Work of this Section.

WORK INCLUDED

Scope: At preconstruction conference, Contractor shall submit to Owner a Schedule of Values as specified herein.

RELATED REQUIREMENTS

General: Following Related Requirements are included or specified in other sections.

A. Payments to Contractor: Section 00 72 13 and Section 00 73 00.

FORM AND CONTENT OF SCHEDULE OF VALUES

Form: Schedule of Values form to be submitted on 8-1/2 inch by 11 inch white paper.

Contents: Use Table of Contents of this Project Manual as a basis for Schedule of Values format for listing costs of work for sections under Division 1 through Division 16. Use each section number under each Division for subtitles. Each section shall be subdivided into separate line items for total cost (with overhead and profit) of separate items in each section.

Values: Round off cost figures to nearest ten (10) dollars. Total of all items shall equal total Contract Sum.

USE OF SCHEDULE OF VALUES

General: This Schedule of Values, when reviewed and accepted by Architect, shall be used only as a basis for Contractors application for payment.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION - (Not Applicable)

* * * * *

End of Section 01 29 73

DIVISION 01 SECTION 01 31 19 - PROJECT MEETINGS

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiation Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: To enable orderly review during progress of Work, and to provide for systematic discussion of problems, Architect will conduct Project Meetings throughout construction period.

RELATED WORK

General: Contractor's relations with his subcontractors and material suppliers, and discussions relative thereto, are Contractor's responsibility and are not part of Project Meetings' content.

QUALITY ASSURANCE

General: Persons designated by Contractor to attend and participate in Project Meetings shall have all required authority to commit Contractor to solutions agreed upon in Project Meetings.

SUBMITTALS

Agenda Items: To maximum extent practicable, advise Architect at least 24 hours in advance Of Project Meetings regarding all items to be added to agenda.

Minutes: Contractor shall compile minutes of each Project Meeting and will furnish five (5) copies to Owner. Contractor may make and distribute such other copies as he wishes.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION

MEETING SCHEDULE

General: Except as noted below for Preconstruction Meeting, Project Meetings will be held once a month. Coordinate as necessary to establish mutually acceptable schedule for meetings. Architect may call for a Project Meeting at Owner's request.

MEETING LOCATION

General: To maximum extent practicable, meetings will be held at Project site.

PRECONSTRUCTION MEETING

General: Preconstruction Meeting will be scheduled within ten days after Owner has issued Notice to Proceed. Provide attendance by authorized representative of Contractor and all major subcontractors. Architect will advise Owner and other interested parties and request their attendance.

Minimum Agenda: Distribute data on, and discuss:

- A. Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, material suppliers, and Architect.
- B. Channels and procedures for communications.
- C. Construction schedule, including sequence of critical work.
- D. Contract Documents, including distribution of required copies of original Documents and Revisions.
- E. Processing of Shop Drawings and other data submitted to Architect for review.
- F. Processing for field decisions and Change Orders.
- G. Rules and regulations governing performance of Work.
- H. Procedures for safety and first aid, security, quality control, housekeeping, and other related matters.

PROJECT MEETINGS

Attendance: To maximum extent practicable, assign same person or persons to represent Contractor at Project Meetings throughout progress of Work. Subcontractors, material suppliers, and others may be invited to attend those project meetings in which their aspects of Work are involved.

Minimum Agenda:

- A. Review, revise as necessary, and approve minutes of previous meeting.
- B. Review progress of Work since last meeting, including status of submittals for approval.
- C. Identify problems which impede planned progress.
- D. Develop corrective measures and procedures to regain planned schedule.
- E. Complete other current business including review of Contractor's current Request for Payment.

* * * * *

End of Section 01 31 19

DIVISION 01 SECTION 01 33 23 - PRODUCT DATA AND SAMPLES

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiation Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications shall apply to the Work of this Section.

Scope: Submit Shop Drawings, Product Data and Samples as required by Contract Documents in accordance with requirements specified herein.

RELATED REQUIREMENTS

General: Following Related Requirements are included as specified in other sections.

- A. Definitions, and Additional responsibilities of Parties to Contract: Section 00 72 13 and Section 00 73 00.
- B. Record Documents: Section 01 78 00

Schedule: Designate in construction schedule, or in a separate coordination schedule, dates for submission and dates reviewed Shop Drawings, Product Data and Samples will be needed.

SHOP DRAWINGS

General: Where Shop Drawings are required for submittal under individual sections, drawings shall be submitted and presented in clear and thorough manner as follows:

- A. Drawings: Provide Shop Drawings identified by reference to appropriate Specification Section with all information required in accordance with submittal requirements found under individual sections of Project Manual Specifications.
- B. Details: Details shall be identified by reference to sheet and detail, schedule or room numbers shown on Contract Drawings.
- C. Required Number: One (1) set in reproducible form (PDF Format) on CD or DVD and two (2) bond sets of prints.
 - 1. Submit prints to Owner rolled in tube; do not fold. Send CD's or DVD's in proper mailing package to prevent damage.

Corrections: Owner will mark corrections, comments and reproducible sepias and return required number of prints of marked up sepias.

Re-submittals: If directed, submit one (1) set of corrected Shop Drawings in reproducible form PDF Format on CD or DVD.

Note: Multiple project submittals will not be allowed. Provide shop drawings for each individual project.

PRODUCT DATA

General: Where Product Data, brochures, descriptive literature, color charts, etc. are required for submittal under individual sections, submit as follows:

A. Preparation:

1. Clearly mark each copy to identify Specification Section and pertinent products or models.
2. Show performance characteristics and capacities.
3. Show dimensions and clearances required.
4. Show wiring or piping diagrams and controls.

B. Required Number: Submit six (4) copies.

Note: Multiple project submittals will not be allowed. Provide product data for each individual project.

Notice: Fax submittals of product data will not be allowed unless Owner allows in special circumstances.

SAMPLES

General: Where samples are required for submittal under individual sections, submit as follows:

A. Office Samples: Samples shall be of sufficient size and quantity to clearly illustrate.

1. Functional characteristics of product, with integrally related parts and attachment devices.
2. Full range of color, texture and pattern.
3. Provide required number as specified in respective Section.

B. Field Samples:

1. Contractor shall erect, at Project site, at a location acceptable to Owner.
2. Size or area; that specified in respective sections.
3. Fabricate each sample and mock-up complete and finished as specified in respective sections.
4. Remove mock-ups at conclusion of Work or when acceptable to Architect as specified in respective section.

Note: Multiple project submittals will not be allowed. Provide samples for each individual project.

CONTRACTOR RESPONSIBILITIES

General: Contractor's responsibilities for submittals shall be as follows:

A. Review: Contractor to review Shop Drawings, Product Data and Samples prior to submission to Architect.

B. Determine and Verify:

1. Field measurements.
2. Field construction criteria.
3. Catalog numbers and similar data.
4. Conformance with Project Specifications.

C. Note: Begin no fabrication or work which requires submittals until return of submittals with Owner's approval, unless such approval is waived in writing.

SUBMISSION REQUIREMENTS

General: Make Submittals promptly in accordance with approved schedule, and in such sequence as to cause no delay in Work.

Submittal Contents: Submittals shall include a cover sheet or title page which shall show following information:

- A. Date of submission and dates of any previous submissions.
- B. Project Title and Architect's Commission number.
- C. Names of:
 - 1. Contractor
 - 2. Supplier
 - 3. Manufacturer
- D. Identification of product by Project Manual Specification section number.
- E. Field dimensions, clearly identified as such.
- F. Applicable standards, such as A.S.T.M.
- G. Identification of deviations from Contract Documents.
- H. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of information within submittal with requirements. Submittals which have not been stamped and certified by the Contractor, will be returned without further review, at Contractor's expense.

RESUBMISSION REQUIREMENTS

General: Make any corrections or changes in submittals required by Architect and resubmit until approved. Resubmission requirements are same as noted above for submissions with following addition requirements:

- A. Shop Drawings and Product Data:
 - 1. Revise initial changes or data, and resubmit.
 - 2. Indicate any revisions on resubmittals.
 - 3. Indicate any changes which have been made other than those requested by Owner.
- B. Samples: Submit new samples as required for initial submittal.

DISTRIBUTION

Shop Drawings and Product Data: Distribute reproductions of Shop Drawings and copies of Product Data which carry Architect's stamp of approval to:

- A. Job site file.
- B. Record Documents file.
- C. Subcontractors.
- D. Supplier or Fabricator.
- E. Other affected contractors or subcontractors.

Samples: Distribute approved samples as directed by Architect.

Owner (Grambling) DUTIES

General: Owner to review submittals with reasonable promptness and in accord with schedule.

Owner to approval stamp and initial or signature, and indicate approval of submittal or requirements for resubmittal. Owner to return to Contractor for distribution, or for resubmission.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION - (Not Applicable)

* * * * *

End of Section 01 33 23

DIVISION 01 SECTION 01 42 15 - DEFINITIONS AND STANDARDS

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

DEFINITIONS

General Explanation: A substantial amount of specification language constitutes definitions for terms found in other Contract Documents, including Drawings, which must be recognized as diagrammatic in nature and not completely descriptive of requirements indicated thereon. Certain terms used in Contract Documents are defined generally in this article. Definitions and explanations of this section are not necessarily either complete or exclusive, but are general for Work to extent not stated more explicitly in another provision of Contract Documents.

A. General Requirements: Provisions or requirements of DIVISION 1 Sections. General Requirements apply to entire work of Contract and, where so indicated, to other elements which are included in Project.

B. Indicated: Term "indicated" is a cross-reference to details, notes or schedules on Drawings, to other paragraphs or schedules in specifications, and to similar means of recording requirements in Contract Documents. Where terms such as "shown", "noted", "scheduled", and "specified" are used in lieu of "indicated", it is for purpose of helping reader locate cross-reference, and no limitation of location is intended except as specifically noted.

C. Directed, Requested, etc.: Where not otherwise explained, terms such as "directed", "requested", "authorized", "selected", "etc." However, no such implied meaning will be interpreted to extend responsibility into Contractor's area of construction supervision.

D. Approve: Where used in conjunction with Owner's response to submittals, requests, applications, inquiries, reports and claims by Contractor, meaning of term "approved" will be held to limitations of Architect's responsibilities and duties as specified in General and Supplementary Conditions. In no case will "approval" by Owner be interpreted as a release of Contractor from responsibilities to fulfill requirements of Contract Documents.

E. Furnish: Except as otherwise defined in greater detail, term "furnish" is used to mean supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, etc., as applicable in each instance.

F. Install: Except as otherwise defined in greater detail, term "install" is used to describe operations at Project site including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations, as applicable in each instance.

G. Provide: Except as otherwise defined in greater detail, term "provide" means furnish and install, complete and ready for intended use, as applicable in each instance.

H. Installer: Entity (person or firm) engaged by Contractor or its subcontractor or subsubcontractor for performance of a particular unit of work at Project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (Installers) be expert in operations they are engaged to perform.

I. Testing Laboratory: An independent entity engaged to perform specific inspections or tests of Work, either at Project site or elsewhere; and to report and (if required) interpret results of those inspections or tests.

INDUSTRY STANDARDS

General Applicability of Standards: Applicable standards of construction industry have same force and effect (and are made a part of Contract Documents by reference) as if copied directly into Contract Documents, or as if published copies were bound herewith.

A. Referenced standards (referenced directly in Contract Documents or by governing regulations) have precedence over non-referenced standards, which are recognized in industry for applicability to work.

Publication Dates: Except as otherwise indicated, where compliance with an industry standard is required, comply with standard in effect as of date of Contract Documents.

Copies of Standards: Provide where needed for proper performance of the work; obtain directly from publication sources.

Abbreviations and Names: Where acronyms or abbreviations are used in specifications or other Contract Documents they are defined to mean industry recognized name of trade association, standards generating organization, governing authority or other entity applicable to context of text provision. Refer to "Encyclopedia of Associations", published by Gale Research Co., available in large libraries.

GOVERNING REGULATIONS/AUTHORITIES

General: Procedure followed by Architect has been to contact governing authorities where necessary to obtain information needed for purpose of preparing Contract Documents recognizing that such information may or may not be of significance in relation to Contractor's responsibilities directly for necessary information and decisions having a bearing on performance of Work. Contractor shall contact governing authorities directly for necessary information and decisions having a bearing on performance of work of this Project.

SUBMITTALS

General: Submit in accordance with requirements of Section 01340 - "Submittals and Shop Drawings".

Permits, Licenses and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of Work.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION - (Not Applicable)

* * * * *

End of Section 01 42 15

DIVISION 01 SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Provide Temporary Facilities and Controls required for this Project including, but not limited to:

- A. Temporary utilities such as heat, water, electricity and telephone.
- B. Field offices and sheds.
- C. Sanitary facilities.
- D. Enclosures such as tarpaulins, barricades, and canopies.
- E. Fencing of Construction area.

RELATED REQUIREMENTS

General: Following related requirements are included or specified in other sections.

- A. Additional requirements of Contractor for Temporary Facilities and Controls: Section 00 72 13 and Section 00 73 00.
- B. Use of Project site: Section 01 11 00.
- C. Protection of Project reference points: Section 01 71 23.11.

Note: Except that all equipment furnished by subcontractors shall comply with all requirements of pertinent safety regulations; ladders, planks, hoists, and other similar items of construction equipment normally furnished by individual trades in execution of their own portions of Work are not part of this Section.

MAINTENANCE OF FACILITIES

General: Use all means necessary to maintain temporary facilities and controls in proper and safe condition throughout progress of Work.

PART TWO - PRODUCTS

FIELD OFFICES AND FACILITIES

General: All temporary field offices and facilities shall be subject to approval by Owner.

Temporary Toilets: Provide and maintain temporary toilets as necessary for all construction personnel. Keep toilets in sanitary condition. Locate temporary toilets as directed, relocate inside building or connect to sewer as soon as progress of Work will allow. Remove from Project site when Work is completed; leave premises clean.

Temporary Storage: Provide temporary sheds or trailers adequate in size for all materials and supplies that require protected storage as required for performance of the Work. Remove from Project site upon completion of Work.

ENCLOSURES

General: Furnish, install, and maintain for duration of construction all required scaffolds, tarpaulins, barricades, canopies, warning signs, steps, bridges, platforms, and other temporary construction necessary for proper completion of Work in compliance with all safety and other regulations.

PROJECT SIGNS

General: Allow no signs or advertising of any kind on Project site except as specifically approved.

PART THREE - EXECUTION

MAINTENANCE AND REMOVAL

General: Maintain all Temporary Facilities and Controls as long as needed for safe and proper completion of Work. Remove all such Temporary Facilities and Controls as rapidly as progress of Work will permit, or as directed by Architect.

* * * * *

End of Section 01 50 00

DIVISION 01 SECTION 01 61 00 - MATERIALS AND EQUIPMENT

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiation Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Provide materials and equipment that are indicated and/or specified to be incorporated into Work as follows:

- A. Conform to applicable specifications and standards.
- B. Comply with size, make, type, and quality indicated and/or specified or as specifically approved in writing.
- C. Manufactured and Fabricated Products:
 - 1. Design, fabricate and assemble in accordance with best engineering and shop practices.
 - 2. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - 3. Two or more items of same kind shall be identical and by same manufacturer.
 - 4. Products shall be suitable for service conditions.
 - 5. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved by Architect in writing.
- D. Do not use materials or equipment for any purpose other than that for which it is designed or is specified.

RELATED REQUIREMENTS

General: Following related requirements are included or specified in other sections:

- A. Responsibilities of all Parties to the Contract: Section 00 72 13 and Section 00 73 00
- B. Summary of Work: Section 01 11 00
- C. Submittals and Shop Drawings: Section 01 33 23
- D. Substitutions and Product Options: Section 01 62 00
- E. Operating & maintenance data: Section 01 78 00
- F. Cleaning: Section 01 74 00

MANUFACTURER'S INSTRUCTIONS

General: When Contract Documents require that installation of various products used in Project be installed in compliance with manufacturer's printed instructions, Contractor shall execute that portion of the Work as follows:

- A. Distribution: Obtain and distribute copies of such instructions to parties involved in each products installation including two (2) copies. Maintain one set of complete instructions at jobsite during installation. Include one complete set of instructions with Project Record Documents.

- B. Execution: Handle, install, connect, clean, condition and adjust products in strict accordance with such instructions and in conformance with specified requirements.
1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Architect for further instructions.
 2. Do not proceed with Work without clear instructions.
 3. Perform Work in accordance with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.
- C. Inspection: Manufacturer's printed installation instructions which, when specified and approved by Architect, shall become basis for inspecting and accepting or rejecting actual installation methods used on Work.

TRANSPORTATION AND HANDLING

General: Arrange deliveries of products in accordance with construction schedules, coordinate with Work and condition at Project site as follows:

- A. Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
- B. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that products are properly protected and that they are undamaged.
- C. Provide equipment and personnel to handle product by methods to prevent soiling or damage to products or packaging.

STORAGE AND PROTECTION

Storage: Store products in accordance with manufacturer's instructions, with seals and labels intact and legible, as indicated in various other sections and as follows:

- A. Storage: Store products subject to damage by elements in weathertight enclosures.
- B. Temperature: Maintain temperature and humidity within ranges covered by manufacturer's instructions.
- C. Exterior Storage: Provide exterior storage as follows:
1. Store fabricated products above ground, on blocking or skids, prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, provide adequate ventilation to avoid condensation.
 2. Store loose granular materials in well-drained area on solid surfaces to prevent mixing with foreign matter.
- D. Inspection: Arrange storage in manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions and that products are free from damage or deterioration.

Protection after Installation: Provide substantial covering as necessary to protect installed products from damage from traffic and/or subsequent construction operations. Remove when no longer needed.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION - (Not Applicable)

* * * * *

End of Section 01 61 00

DIVISION 1 SECTION 01 62 00 - SUBSTITUTIONS AND PRODUCT OPTIONS

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiation Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

RELATED REQUIREMENTS

General: Following related requirements are included or specified in other sections:

- A. Responsibilities of all Parties of Contract: Section 00 72 13 and Section 00 73 00
- B. Submittals and Shop Drawings: Section 01 33 23

SUBSTITUTIONS AND PRODUCT OPTIONS

Product List: Within 120 days after Contract Date, submit to Architect a complete list of major products proposed to be used, with name of manufacturer and installing subcontractor.

Contractor's Options:

- A. For products or methods specified only by commercial standard, reference standard, Federal Specification, trade association standards or other similar standards; select any product or method meeting that standard. Where this Specification requires a better quality than such standard, these Project Specifications shall govern.
- B. For products specified by naming several products or manufacturers, select any one of products or manufacturers named, which complies with this Project Specification.
- C. For products specified by naming one or more products, methods or manufacturers and "or equal", Contractor must submit a request as for substitutions for any product or method or manufacturer not specifically named.

Note: Where proprietary products or methods are specified for one use, the intention is to establish a standard of quality, performance and/or size and not to exclude any other products of equal merit unless stated otherwise.

Substitutions: For products specified as above, Bids shall be based on products named in Project Manual, or on items which Architect has designated as an "approved equal". A product not named in Project Manual or that is not approved by Architect will only be acceptable when such product meets all other requirements of Project Specifications, including specifications of originally specified products' manufacturer as of date of Contract Documents.

Requests for Substitutions: Requests for Owner approval of a product as equal will not be considered unless sufficient data for evaluation is received by Architect.

Submittals: Submit a separate request for each Product, supported with complete data, with drawings, cut sheets and samples as appropriate, including:

- A. Comparison of qualities of proposed substitution with that of specified product.

- B. Changes required in other elements of the Work because of substitution.
- C. Effect on construction schedule.
- D. Cost data comparing proposed substitution with product specified.
- E. Availability of maintenance service, and source of replacement parts.

Contractor's Representation: Contractor's substitution of a product constitutes a representation that Contractor:

- A. Has investigated proposed product and determined that it is equal or superior in all respects to that specified.
- B. Will provide same warranties or bonds for substitution as for product specified.
- C. Will coordinate installation of an accepted substitution into Work, and make such other changes as may be required to make Work complete in all respects.
- D. Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.

Approval: Owner shall be judge of acceptability of proposed substitutions. Architect will review requests for substitutions with reasonable promptness, and notify Contractor, in writing, of decision to accept or reject requested substitution.

Notice: Owner's approval of an item for a previous project does not constitute approval for this Project.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION - (Not Applicable)
* * * * *

End of Section 01 62 00

DIVISION 01 SECTION 01 70 10 - PROJECT CLOSEOUT REQUIREMENTS

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Comply with Project Closeout Requirements stated herein and in General Conditions of Contract for administrative procedures in closing out Work of Project.

RELATED REQUIREMENTS

General: Following related requirements are included or specified in other sections:

- A. Responsibilities of all Parties to Contract: Section 00 72 13 and Section 00 73 00
- B. Partial Owner Occupancy: Section 01 11 00
- C. Cleaning: Section 01 70 10
- D. Warranties: Section 01 78 00
- E. Closeout submittals required of Trades: Respective sections of Project Manual Specifications.

SUBSTANTIAL COMPLETION

General: When Contractor considers Work is substantially complete, he shall submit to Owner:

- A. A written notice that Work, or designated portion thereof, is substantially complete.
- B. A list of items to be completed or corrected.

Inspection: Within a reasonable time after receipt of such notice, Architect will make an inspection to determine status of completion.

Reinspection: Should Architect determine that Work is not substantially complete:

- A. Owner will promptly notify Contractor in writing, giving reasons therefore.
- B. Contractor shall remedy deficiencies in Work, and send a second written notice of substantial completion to Architect.
- C. Owner will re-inspect Work.

Closeout: When Owner concurs that Work is substantially complete, he will:

- A. Prepare a Certificate of Substantial Completion on AIA Form G704, accompanied by Contractor's list of items to be completed or corrected, as verified and amended.
- B. Submit the Certificate to Owner and Contractor for their written acceptance of responsibilities assigned to them in Certificate.

FINAL INSPECTION

General: When Contractor considers Work is complete, he shall submit written certification that:

- A. Contract Documents have been reviewed.
- B. Work has been inspected for compliance with Contract Documents.
- C. Work has been completed in accordance with Contract Documents.
- D. Equipment and systems have been tested in presence of Owner's representative and are operational.
- E. Work is completed and ready for final inspection.

Inspection: Architect will make an inspection to verify status of completion with reasonable promptness after receipt of such certification.

Reinspection: Should Owner consider that Work is incomplete or defective:

- A. Owner will promptly notify Contractor in writing, listing incomplete or defective work.
- B. Contractor shall take immediate steps to remedy stated deficiencies, and send a second written certification to Owner that Work is complete.
- C. Owner will reinspect Work.

Closeout: When Architect finds that Work is acceptable under Contract Documents, he shall request Contractor to make closeout submittals.

SUBMITTALS

General: Contractor shall submit all required closeout submittals in accordance with requirements of Section 01340 - "Shop Drawings and Submittals" unless stated otherwise herein.

Certifications: Submit to Architect three (3) copies of all certifications under individual headings and sections of Project Specifications; including but not limited to following list:

- A. Certificate of Occupancy
- B. Certificate of Inspection:

Project Record Documents: Submit to Owner at completion of Project, following Project Record Documents:

- A. Label each document "PROJECT RECORD" in neat large printed letters.
- B. Record information concurrently with construction progress.
 - 1. Do not conceal any work until required information is recorded.
- C. Drawings: Legibly mark to record actual construction:
 - 1. Depths of various elements of foundation in relation to finish first floor datum.
 - 2. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Location of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of structure.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Field Order or by Change Order.
 - 6. Details not on original Contract Drawings.
 - 7. Required Copies: One (1) Sepia and three (3) blue line prints.
- D. Specifications and Addenda: Legibly mark each Section to record:

1. Manufacturer, trade name, catalog number, and Supplier of each Product and item of equipment actually installed.
 2. Changes made by Field Order or by Change Order.
 3. Required Copies: Three (3).
- E. At Contract close-out, deliver Record Documents to for Owner.
- F. Accompany submittal with transmittal letter in duplicate, containing:
1. Date.
 2. Project title and number.
 3. Contractor's name and address.
 4. Title and number of each Record Document.
 5. Signature of Contractor or his authorized representative.

Operating and Maintenance Data: Submit to Owner at completion of Project three (3) copies of the following Operating and Maintenance Data:

- A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under Contract.
1. Provide operating and maintenance data as specified in other pertinent sections of Specifications.
- B. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems.

Warranties and Service Contracts: Submit in accordance with requirements of Section 01 78 00 - "Closeout Submittals".

Spare Parts and Maintenance Materials: Submit Lists in accordance with requirements of Section 01 78 00 - "Closeout Submittals".

Evidence of Payment and Release of Liens: Submit in accordance with requirements of Section 00 72 13 - "General Conditions of the Contract" and Section 00 73 00 - "Supplementary Conditions" and Section 01 78 00 - "Closeout Submittals".

Certificate of Insurance for Products and Completed Operations: Submit to Architect in accordance with requirements of Section 00 72 13 - "General Conditions of the Contract" and Section 00 73 00 - "Supplementary Conditions".

FINAL ADJUSTMENT OF ACCOUNTS

General: Submit a final statement of accounting to Architect.

Form: Statement shall reflect all adjustments to the Contract sum:

- A. The original Contract Sum.
- B. Additions and deductions resulting from:
 1. Previous Change Orders.
 2. Unit Prices.
 3. Deductions for uncorrected Work.
 4. Other adjustments.
- C. Total Contract Sum, as adjusted.
- D. Previous payments.
- E. Sum remaining due.

Final Adjustment: Architect will prepare a final Change Order, reflecting approved adjustments to Contract Sum which were not previously made by Change Orders.

FINAL APPLICATION FOR PAYMENT

General: Contractor shall submit Final Application for Payment in accordance with procedures and requirements stated in Conditions of Contract.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION - (Not Applicable)

* * * * *

End of Section 01 70 10

DIVISION 01 SECTION 01 71 23.11 - GRADES, LINES AND LEVELS

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiation Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Provide all requirements for Grades, Lines and Levels as specified herein.

RELATED REQUIREMENTS

General: Following related requirements are included or specified in other sections:
A. Basic responsibilities of all Parties to Contract: Section 00 72 13 and Section 00 73 00
B. Summary of Work: Section 01 11 00

EXAMINATION OF PROJECT SITE

General: Contractor is requested to visit existing Project site or building, compare drawings and specifications with any Work in place, and inform themselves of all conditions, including other Work, if any, being performed.

Notice: Failure to visit site will in no way relieve Contractor from necessity of furnishing any material or performing any Work that may be required to complete Work in accordance with Drawings and Project Manual specifications. Any additional work required to complete Work of Project in accordance with Drawings and Project Manual Specifications shall be done so without additional cost to Owner.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION

LAYING OUT OF PROJECT WORK

General: Upon entering Project site for purpose of beginning Work, locate general reference points; take such action as is necessary to prevent their destruction; lay out Work; be responsible for lines, elevations, measurements of buildings, grading, paving, utilities, other Contract Work. Exercise proper precaution to verify figures indicated before laying out Work; errors resulting from failure to exercise precaution will be Contractor's responsibility. Notify Owner when ready to layout building so that Work may start in presence of Owner Representative.

* * * * *

End of Section 01 71 23.11

DIVISION 01 SECTION 01 73 29 - CUTTING AND PATCHING

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiation Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: This section establishes general requirements pertaining to cutting (including excavating), fitting, and patching of the Work required to:

- A. Make its several parts fit together properly.
- B. Uncover portions of the Work to provide for installation of ill-timed work.
- C. Remove and replace defective work.
- D. Remove and replace work not conforming to requirements of Contract Documents.
- E. Remove samples of installed work as specified for testing.
- F. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.

RELATED REQUIREMENTS

General: Following related requirements are included or specified in other sections.

- A. Basic responsibilities of all Parties to Contract: Section 00 72 13 and Section 00 73 00
- B. Summary of Work: Section 01 11 00
- C. Substitutions and product options: Section 01 62 00
- D. Excavating and backfilling: Section 31 23 15

SUBMITTALS

General: Submit in accordance with requirements of Section 01340 - "Submittals and Shop Drawings".

Substitutions of Materials: Should conditions of Work or construction schedule indicate a change of products from original installation, Contractor shall submit a Request for Substitutions as specified in Section 01 62 00 - "Substitutions and Product Options".

Notice: Submit a written notice designating date and time work will be executed and/or uncovered.

PART TWO – PRODUCTS MATERIALS

General: Comply with specifications and standards for each specific product or material involved.

PART THREE - EXECUTION

INSPECTION

General: Inspect existing conditions of Project, including elements subject to damage or to movement during cutting and patching. After uncovering work, inspect conditions affecting installation of Products, or performance of Work. Report unsatisfactory or questionable conditions to Architect in writing; do not proceed with Work until Architect has provided further instructions.

PREPARATION AND PROTECTION

Temporary Supports: Provide adequate support as necessary to assure structural value or integrity of affected portion of Work.

Protection: Provide devices and methods to protect other portion of Project from damage. Provide protection from elements for that portion of Project which may be exposed by cutting and patching work, and maintain any excavations free from water.

PERFORMANCE

General: Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs or replacement.

Excavations: Execute excavating and backfilling by methods which will prevent settlement or damage to other work.

Contractor: Employ original installer or fabricator to perform cutting and patching for:

- A. Structural concrete slabs, beams or columns.
- B. Weather-exposed or moisture-resistant elements.
- C. Sight-exposed finished surfaces.

Fitting and Adjustment: Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes. Restore work which has been cut or removed; install new products to provide completed work in accordance with requirements of Contract Documents. Fit work airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.

Finishes: Refinish entire surface as necessary to provide an even finish to match adjacent finishes:

- A. For continuous surfaces, refinish to nearest intersections.
- B. For an assembly, refinish entire unit.

* * * * *

End of Section 01 73 29

DIVISION 01 SECTION 01 78 00 - CLOSEOUT SUBMITTALS

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiation Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Contractor shall furnish to Architect for forwarding to Owner all Warranties, Bonds, Service and Maintenance Contracts, Spare Parts Lists and other Lists as specified herein.

RELATED REQUIREMENTS

General: Following related requirements are included or specified in other sections:

- A. Performance Bond and Labor and Material Payment Bond: Section 00 72 13 and Section 00 73 00
- B. General Warranty of Construction: Section 00 72 13
- C. Contract closeout: Section 01 70 10
- D. Operating and Maintenance Data: Section 01 70 10
- E. Warranties required for specific products: Each respective section of Specifications.
- F. Provisions of Warranties; Duration: Respective section of Specifications which specifies product.

SUBMITTALS

General: Contractor shall assemble and submit warranties, bonds, service and maintenance contracts and parts lists, execute by each respective manufacturers, suppliers and subcontractors as specified herein.

Number of Required Original Signed Copies: three (3) each.

Warranties: Submit required number of all warranties, required under each individual Specification section. Submit two (2) copies of Warranty List in attached form (Page 01740) showing name of subcontractor or supplier, material or equipment under warranty, number of years of warranty and starting date of warranty. In those cases where an additional letter or brochure is attached, it shall be so noted in "Remarks" column on form.

Bonds: Submit required number of all Bonds.

Service and Maintenance Contracts: Submit required number of all Service and Maintenance Contracts under each individual Specification section. Submit two (2) copies of Service and Maintenance Contracts List in attached form (Page 01740) showing name of company holding

said contract, material or equipment under such contract, number of years of contract and starting date of said contract. In those cases where an additional letter or brochure is attached, it shall be so noted in "Remarks" column on Form.

Spare Parts Lists: Submit Spare Parts Lists for those spare parts specified under each individual Specification section. Submit two (2) copies of Spare Parts Lists in attached form (Page 01740) showing name of manufacturer and product name or number; name of material supplier and amount supplied.

Submittal Requirements: These submittals shall be prepared in duplicate packets as follows:

- A. Format: White paper sheets, 8-1/2 inch x 11 inches, prepunched for 3-ring binders. Fold larger sheets to fit into binders.
- B. Table of Contents: Neatly typed, in orderly sequence.
- C. Binders: Commercial quality, three-ring, with durable and cleanable plastic covers.
 - 1. Covers: Identify each packet with typed or printed title: a. **"WARRANTIES, BONDS, SERVICE CONTRACTS AND SPARE PARTS LIST"** and with title of Projects and name of Contractor.

Time of Submittals: These submittals shall be made within time frames as follows:

- A. For equipment or component parts of equipment put into service during progress of construction, submit documents within 10 days after inspection and acceptance.
- B. Otherwise make submittals within ten days after Date of Substantial Completion, prior to final request for payment.
- C. For items of work, where acceptance is delayed materially beyond Date of Substantial Completion, listing date of acceptance as start of warranty period.

PART TWO - PRODUCTS - (Not Applicable)

PART THREE - EXECUTION - (Not Applicable)

* * * * *

End of Section 01 78 00

DIVISION 08 SECTION 08 71 00 - DOOR HARDWARE

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Provide door hardware as indicated and specified herein.

Section Includes: Finish Hardware for door openings, except as otherwise specified herein.

- A. Door hardware for aluminum doors.
- B. Door hardware for FRP doors.
- D. Door hardware for other doors indicated.
- E. Keyed cylinders as indicated.
- F. Intent of Hardware Groups

Note: Should items of hardware not definitely specified be required for completion of the Work, furnish such items of type and quality comparable to adjacent hardware and appropriate for service required.

- A. Where items of hardware aren't definitely or correctly specified, are required for completion of the Work, a written statement of such omission, error, or other discrepancy to Architect, prior to date specified for receipt of bids for clarification by addendum; or, furnish such items in the type and quality established by this specification, and appropriate to the service intended.

SUBMITTALS

General: Submit in accordance with requirements of Section 01 33 23 - "Shop Drawings, Product Data and Samples".

Special Submittal Requirements: Combine submittals of this Section with Sections listed below to ensure the "design intent" of the system/assembly is understood and can be reviewed together.

Product Data: Manufacturer's specifications and technical data including the following:

- A. Detailed specification of construction and fabrication.
- B. Manufacturer's installation instructions.
- C. Wiring diagrams for each electric product specified. Coordinate voltage with electrical before submitting.
- D. Submit 6 copies of catalog cuts with hardware schedule.

Shop Drawings - Hardware Schedule: Submit 6 complete reproducible copy of detailed hardware schedule in a vertical format.

- A. List groups and suffixes in proper sequence.
- B. Completely describe door and list architectural door number.
- C. Manufacturer, product name, and catalog number.
- D. Function, type, and style.
- E. Size and finish of each item.
- F. Mounting heights.
- G. Explanation of abbreviations and symbols used within schedule.
- H. Detailed wiring diagrams, specially developed for each opening, indicating all electric hardware, security equipment and access control equipment, and door and frame rough-ins required for specific opening.
- I. Templates: Submit templates and "reviewed Hardware Schedule" to door and frame supplier and others as applicable to enable proper and accurate sizing and locations of cutouts and reinforcing.
- J. Templates, wiring diagrams and "reviewed Hardware Schedule" of electrical terms to electrical for coordination and verification of voltages and locations.
- K. Samples: (If requested by the Architect) 1. 1 sample of Lever and Rose/Escutcheon design, (pair). 2. 3 samples of metal finishes
- L. Contract Closeout Submittals: Comply with Division 1 including specific requirements indicated.
- M. Operating and maintenance manuals: Submit 3 sets containing the following.
- N. Complete information in care, maintenance, and adjustment, and data on repair and replacement parts, and information on preservation of finishes.
- O. Catalog pages for each product.
- P. Name, address, and phone number of local representative for each manufacturer.
- Q. Parts list for each product.
- R. Copy of final hardware schedule, edited to reflect, "As installed".
- S. Copy of final keying schedule
- T. As installed "Wiring Diagrams" for each piece of hardware connected to power, both low voltage and 110 volts.
- U. One set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

SUBSTITUTIONS

General: For products specified herein, Bids shall be based on products named in Project Manual, or on items which Architect has designated as an "approved equal". A product not named in Project Manual or that is not approved will only be acceptable when such product meets all other requirements of Project Specifications, including specifications of originally specified products' manufacturer as of date of Contract Documents.

Requests for Substitutions: Requests for approval of a product as equal will not be considered unless sufficient data for evaluation is received seven (7) days prior to the Bid Opening Date.

Submittals: Submit a separate request for each Product in accordance with requirements of Section 01 62 00 - "Substitutions and Product Options".

Note: Owner's approval of an item for a previous project does not constitute approval for this Project.

QUALITY ASSURANCE

General: Comply with requirements of Division 01 as follows:

- A. Statement of qualification for distributor and installers.
- B. Statement of compliance with regulatory requirements and single source responsibility.
- C. Distributor's Qualifications: Firm with 3 years experience in the distribution of commercial hardware.
- D. Distributor to employ full time Architectural Hardware Consultants (AHC) for the purpose of scheduling and coordinating hardware and establishing keying schedule.
- E. Hardware Schedule shall be prepared and signed by an AHC.
- F. Installer's Qualifications: Firm with 3 years experienced in installation of similar hardware to that required for this Project, including specific requirements indicated.
- G. Regulatory Label Requirements: Provide testing agency label or stamp on hardware for labeled openings.
- H. Provide UL listed hardware for labeled and 20 minute openings in conformance with requirements for class of opening scheduled.
- I. Underwriters Laboratories requirements have precedence over this specification where conflict exists.
- J. Single Source Responsibility: Except where specified in hardware schedule, furnish products of only one manufacturer for each type of hardware.
- K. Review Project for extent of finish hardware required to complete the Work. Where there is a conflict between these Specifications and the existing hardware, notify the Owner in writing and furnish hardware in compliance with the Specification unless otherwise directed in writing by the Architect.

DELIVERY, STORAGE, AND HANDLING

Delivery: Deliver products in original unopened packaging with legible manufacturer's identification.

Packing: Package hardware to prevent damage during transit and storage.

Hardware Marking: Mark hardware to correspond with "reviewed hardware schedule".

Note: Deliver hardware to door and frame manufacturer upon request.

Storage and Protection: Comply with manufacturer's recommendations.

PROJECT CONDITIONS

General: Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for the proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents.

Shop Drawings: Review Shop Drawings (if applicable), for doors and entrances to confirm that adequate provisions will be made for the proper installation of hardware.

WARRANTY

General: Refer to General Conditions of the Contract

Manufacturer's Warranty: As follows:

- A. Closers: Ten years
- B. Exit Devices: Three Years
- C. Locksets & Cylinders: Three years
- D. All other Hardware: Two years.

OWNER'S INSTRUCTIONS

General: Instruct Owner's personnel in operation and maintenance of hardware units.

MAINTENANCE

Extra Service Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 Closeout Submittals Section.

Special Tools: Provide special wrenches and tools applicable to each different or special hardware component.

Maintenance Tools: Provide maintenance tools and accessories supplied by hardware component manufacturer.

Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra service materials.

Maintenance Service: Submit for Owner's consideration maintenance service agreement for electronic products installed.

PART TWO - PRODUCTS

MANUFACTURERS

General: The following manufacturers are approved subject to compliance with requirements of the Contract Documents. Approval of manufacturers other than those listed shall be in accordance with Division 1.

Item: Manufacturer: Approved Equal
Hinges Stanley McKinney, Bommer
Continuous Hinges Stanley Select
Locksets & Cylinders Best
Exit Devices Precision
Pulls Rockwood Trimco
Closers Stanley
Stops Rockwood Trimco
Gasketing Pemko National Guard, Reese

MATERIALS

Hinges: As follows:

- A. Template screw hole locations
- B. Minimum of 2 permanently lubricated non-detachable bearings
- C. Equip with easily seated, non-rising pins
- D. Sufficient size to allow 180-degree swing of door
- E. Furnish hinges with five knuckles and flush concealed bearings
- F. Provide hinge type as listed in schedule.
- G. Furnish 3 hinges per leaf to 7 foot 6 inch height. Add one for each additional 30 inches in height or fraction thereof.
- H. Tested and approved by BHMA for all applicable ANSI Standards for type, size, function and finish
- I. UL10B listed for Fire

Geared Continuous Hinges: As follows:

- A. Tested and approved by BHMA for ANSI A156.26-1996 Grade 1
- B. Anti-spinning through fastener
- C. UL10B listed for 3 hour Fire rating
- D. Non-handed
- E. Lifetime warranty
- F. Provide Fire Pins for 3-hour fire ratings
- G. Sufficient size to permit door to swing 180 degrees

Mortise Type Locks and Latches: As follows:

- A. Tested and approved by BHMA for ANSI A156.13, Series 1000, Operational Grade 1, Extra-Heavy Duty, Security Grade 2 and be UL10C
- B. Fit ANSI A115.1 door preparation
- C. Functions and design as indicated in the hardware groups
- D. Solid, one-piece, 3/4-inch (19mm) throw, anti-friction latchbolt made of self-lubricating stainless steel
- E. Deadbolt functions shall have 1 inch (25mm) throw bolt made of hardened stainless steel
- F. Latchbolt and Deadbolt are to extend into the case a minimum of 3/8 inch (9.5mm) when fully extended
- G. Auxiliary deadlatch to be made of one piece stainless steel, permanently lubricated
- H. Provide sufficient curved strike lip to protect door trim
- I. Lever handles must be of forged or cast brass, bronze or stainless steel construction and conform to ANSI A117.1. Levers that contain a hollow cavity are not acceptable
- J. Lock shall have self-aligning, thru-bolted trim
- K. Levers to operate a roller bearing spindle hub mechanism
- L. Mortise cylinders of lock shall have a concealed internal setscrew for securing the cylinder to the lockset. The internal setscrew will be accessible only by removing the core, with the control key, from the cylinder body.
- M. Spindle to be designed to prevent forced entry from attacking of lever
- N. Provide locksets with 7-pin removable and interchangeable core cylinders
- O. Each lever to have independent spring mechanism controlling it
- P. Core face must be the same finish as the lockset

Exit Devices: Shall be as follows:

- A. Tested and approved by BHMA for ANSI 156.3, Grade 1
- B. Provide a deadlocking latchbolt
- C. Non-fire rated exit devices shall have cylinder dogging.
- D. Touchpad shall be "T" style
- E. Exposed components shall be of architectural metals and finishes.
- F. Lever design shall match lockset lever design
- G. Provide strikes as required by application.
- H. Fire exit devices to be listed for UL10C
- I. UL listed for Accident Hazard
- J. Provide vandal resistant or breakaway trim
- K. Aluminum vertical rod assemblies are acceptable only when provide with the manufacturers optional top and bottom stainless steel rod guard protectors

Cylinders: As follows:

- A. Provide the necessary cylinder housings, collars, rings & springs as recommended by the manufacturer for proper installation.
- B. Provide the proper cylinder cams or tail piece as required to operate all locksets and other keyed hardware items listed in the hardware sets.
- C. Coordinate and provide as required for related sections.

Door Closers: Shall be as follows:

- A. Tested and approved by BHMA for ANSI 156.4, Grade 1
- B. UL10C certified
- C. Closer shall have extra-duty arms and knuckles
- D. Conform to ANSI 117.1
- E. Maximum 2 7/16 inch case projection with non-ferrous cover
- F. Separate adjusting valves for closing and latching speed, and backcheck
- G. Provide adapter plates, shim spacers and blade stop spacers as required by frame and door conditions
- H. Full rack and pinion type closer with 1½" minimum bore
- I. Mount closers on non-public side of door, unless otherwise noted in specification
- J. Closers shall be non-handed, non-sized and multi-sized 1 through 6

Kickplates: Provide with four beveled edges, 10 inches high by width less 2 inches on single doors and 1 inch on pairs of doors. Furnish oval-head countersunk screws to match finish.

Seals: All seals shall be finished to match adjacent frame color. Seals shall be furnished as listed in schedule. Material shall be UL listed for labeled openings.

Key Control: Provide one wall mounted key cabinet complete with hooks, index and tags with Best cylinder and core.

Silencers: Furnish silencers on all interior frames, 3 for single doors, 2 for pairs. Omit where any type of seals occur.

FINISH

General: Designations used in Schedule of Finish Hardware - 3.5, and elsewhere to indicate hardware finishes are those listed in ANSI/BHMA A156.18 including coordination with traditional

U.S. finishes shown by certain manufacturers for their products

Powder coat door closers to match other hardware, unless otherwise noted. Aluminum items shall be finished to match predominant adjacent material. Seals to coordinate with frame color.

KEYS AND KEYING

General: Provide keyed brass construction cores and keys during the construction period. Construction control and operating keys and core shall not be part of the Owner's permanent keying system or furnished in the same keyway (or key section) as the Owner's permanent keying system. Permanent cores and keys (prepared according to the accepted keying schedule) will be furnished to the Owner.

Cylinders, Removable and Interchangeable Core System: Best [Peaks] [MX8] 7-pin, Permanent keys and cores: Stamped with the applicable key mark for identification. These visual key control marks or codes will not include the actual key cuts. Permanent keys will also be stamped "Do Not Duplicate."

Transmission of Masterkeys: Transmit Grand Masterkeys, Masterkeys and other Security keys to Owner by Registered Mail, return receipt requested.

Keys: Furnish keys in the following quantities:

- A. 2 each Grand Masterkeys
- B. 6 each Masterkeys
- C. 2 each Control keys
- D. 3 each Change keys each keyed core
- E. 13 each Construction masterkeys
- F. 1 each Construction Control keys

Construction Cores: The Owner, or the Owner's agent, will install permanent cores and return the construction cores to the Hardware Supplier. Construction cores and keys remain the property of the Hardware Supplier.

Keying Schedule: Arrange for a keying meeting, and programming meeting with Owner and hardware supplier, and other involved parties to ensure locksets and locking hardware, are functionally correct and keying and programming complies with project requirements. Furnish 3 typed copies of keying and programming schedule to Owner.

PART THREE - EXECUTION

EXAMINATION

Verification of Conditions: Examine doors, frames, related items and conditions under which Work is to be performed and identify conditions detrimental to proper and or timely completion. Do not proceed until unsatisfactory conditions have been corrected.

HARDWARE LOCATIONS

Hardware Height: Mount hardware units at heights indicated in the following publications except as specifically indicated or required to comply with the governing regulations.

Hardware Location Standard for Steel Doors and Frames: Recommended Locations for Builder's Hardware for Standard Steel Doors and Frames, by the Door and Hardware Institute

(DHI).

Hardware Location Standard for Wood Flush Doors: NWWDA Industry Standard I.S.1.7, Hardware Locations for Wood Flush Doors.

INSTALLATION

General: Install each hardware item per manufacturer's instructions and recommendations. Do not install surface mounted items until finishes have been completed on the substrate. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

Security Notice: Conform to local governing agency security ordinance.

ADA Standard: Conform to ANSI A117.1 for positioning requirements for disabled.

Note: Installed hardware using the manufacturers fasteners provided. Drill and tap all screw holes located in metallic materials. Do not use "Riv-Nuts" or similar products.

FIELD QUALITY CONTROL AND FINAL ADJUSTMENT

Contractor/Installers, Field Services: After installation is complete, contractor shall inspect completed door openings on site to verify installation of hardware is complete and properly adjusted, in accordance with both the Contract Documents and final shop drawings.

Closers: Check and adjust closers to ensure proper operation.

- A. Adjust closer to complete full closing cycle in less than 4 to 6 seconds without abrupt change of speed between "Sweep" and "Latch" speeds.
- B. Adjust "Backcheck" according to manufacturer's instructions.
- C. Set exterior doors closers to have 8.5 lbs maximum pressure to open, interior non-rated at 5 lbs, rated openings at 12 lbs

Latchsets and Locksets: Check latchset, lockset, and exit devices are properly installed and adjusted to ensure proper operation.

- A. Verify levers are free from binding.
- B. Ensure latchbolts and dead bolts are engaged into strike and hardware is functioning.

Report: Report findings, in writing, to architect and hardware supplier outlining corrective actions and recommendations.

SCHEDULE OF FINISH HARDWARE

Manufacturer's Abbreviations:

BE Best Access Systems

PE Pemko

PR Precision

RO Rockwood

SE Select

ST Stanley

Option List

Code Description

CD CYLINDER DOGGING

4BE BEVELLED 4 SIDES
CSK COUNTERSUNK HOLES

Finish List

Code Description

613 Oxidized Satin Bronze, Oil Rubbed
622 Flat Black Coated
626 Satin Chromium Plated
628 Aluminum
630 Satin Stainless Steel
689 Aluminum Painted
693 Black Painted
695 Dull Bronze Painted
BLK Black

Hardware Sets

Grambling High-School Gym

SET #1 – Single SL-17(NO Vision Lite Kit – 1” Insulated Glass Ext. West Exit (from Gym) –

1 Exit Device	2101-EO x Less Pull	630	PR
1 Closer	D4551 EDA	689	ST
1 Continuous Hinge	SL24HD	628	SE

SET #2 – Single SL-17(w/ ¼ Vision Lite Kit – 1” Insulated Glass Ext. S.W. Exit (from Gym)

1 Continuous Hinge	SL24HD	628	SE
1 Exit Device	2103-Less Trim	630	PR
1 Cylinder	1E72 PATD	626	BE
1 Closer	D4551 EDA	689	ST
1 Pull	SL86	628	SL

Grambling High-School Gym-(Continued)**SET #3 – Single SL-17(NO Vision Lite Kit – 1” Insulated Glass Ext. S.W. Exit (from Gym)**

1	Continuous Hinge	SL24HD	628	SE
1	Exit Device	2103-Less Trim	630	PR
1	Cylinder	1E72 PATD	626	BE
1	Closer	D4551 EDA	689	ST
1	Pull	SL86	628	SL

SET #4– Pair SL-17(NO Vision Lite Kit – 1” Insulated Glass) Ext. N.E. DD from Gym

2	Continuous Hinges	SL24HD	628	SE
1	Key Removable Mullion	KR822	689	PR
2	Exit Device	2101-EO x Less Pull	630	PR
1	Cylinder	1E74 PATD	626	BE
2	Closer	D4551 EDA	689	ST

SET #5 – Single SL-17(w/ ¼ Vision Lite Kit – 1” Insulated Glass Ext. S.E. Exit (from Gym)

1	Continuous Hinge	SL24HD	628	SE
1	Exit Device	2103-Less Trim	630	PR
1	Cylinder	1E72 PATD	626	BE
1	Closer	D4551 EDA	689	ST
1	Pull	SL86	628	SL

Grambling High-School

SET #6 – Single SL-17(w/ ¼ Vision Lite Kit – 1” Insulated Glass) Ext. East Entry Door

1 Continuous Hinge	SL24HD	628	SE
1 Exit Device	2108-V4908A	630	PR
1 Cylinder	1E72 PATD	626	BE
1 Closer	D4551 EDA	689	ST

SET #7 – Single SL-17(w/ ¼ Vision Lite Kit – 1” Insulated Glass) Ext. West Entry Door

1 Continuous Hinge	SL24HD	628	SE
1 Exit Device	2101-EO x Less Pull	630	PR
1 Pull	SL86	628	SL
1 Closer	D4551 EDA	689	ST

Grambling Middle School

SET #8 – Pair SL-17(w/ ¼ Vision Lite Kit – 1” Insulated Glass) Ext. West Main Entry Dbl-Doors

2 Continuous Hinges	SL24HD	628	SE
1 Key Removable Mullion	KR822	689	PR
1 Pull	SL86	628	SL
1 Exit Device	2101-EO x Less Pull	630	PR
1 Exit Device	2108-V4908A	630	PR
1 Cylinder	1E72 PATD	626	BE
1 Cylinder	1E74 PATD	626	BE

2 Closer	D4551 EDA	689	ST
----------	-----------	-----	----

SET #9 – Ext. East Double-Door Entry

2 Closers	D4551 EDA	689	ST
-----------	-----------	-----	----

Properties Building

SET #10 – Pair SL-17(w/ ¼ Vision Lite Kit – 1” Insulated Glass) Ext. Front Entry # A

2 Continuous Hinges	SL24HD	628	SE
2 Pull	SL86	628	SL
2 Exit Device	2101-EO x Less Pull	630	PR
2 Closer	D4551 EDA	689	ST

SET #11 – Pair SL-17(w/ ¼ Vision Lite Kit – 1” Insulated Glass) Ext. Entry # B

2 Continuous Hinges	SL24HD	628	SE
2 Pull	SL86	628	SL
2 Exit Device	2101-EO x Less Pull	630	PR
2 Closer	D4551 EDA	689	ST

SET #12 – Pair SL-17(w/ ¼ Vision Lite Kit – 1” Insulated Glass) Ext. Entry # C

2 Continuous Hinges	SL24HD	628	SE
2 Pull	SL86	628	SL
2 Exit Device	2101-EO x Less Pull	630	PR
2 Closer	D4551 EDA	689	ST

SET #13 – Singe Roll-up Steel Door with chain hoist Ext. Entry

Overhead door Series 625 or equal. Field verify dimensions.

Finish List

<u>Code</u>	<u>Description</u>
AL	Aluminum
DB	Dark Bronze
26D	Satin Chrome
32D	Satin Stainless Steel
613	Oil Rubbed Bronze
626	Satin Chromium Plated
628	Satin Aluminum, Clear Anodized
630	Satin Stainless Steel
689	Aluminum Painted
GREY	Grey
US26D	Chromium Plated, Dull
US32D	Stainless Steel, Dull

* * * * *

End of Section 08 71 00

DIVISION 02 SECTION 02 41 19.13 - SELECTIVE BUILDING DEMOLITION

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Provide all required materials, equipment and labor to execute required Selective Demolition as indicated on Drawings and specified herein.

RELATED REQUIREMENTS

General: Following related requirements are included or specified in other sections:

- A. Protection of Persons and Property: Section 00 73 00
- B. Summary of Work: Section 01 11 00
- C. Cutting and patching: Section 01 71 29
- D. Salvaged materials: Section 01 61 00
- E. Cleaning: Section 01 74 00

QUALITY ASSURANCE

Safety: Contractor shall be responsible for all safety code requirements and control thereof.

Protection: Contractor shall take all precautions necessary to guard against movement, settlement, collapse or other damage to existing construction and finished grades. Repair any damage to original condition.

Shoring: If Drawings indicate that shoring is required or the Contractor anticipates using shoring; the Contractor shall employ an experienced, responsible specialized contractor to shore and brace the existing structure.

PROJECT CONDITIONS

Existing Conditions: Owner assumes no responsibility for actual conditions of structures or portions thereof to be demolished.

Notice: Use of explosives is not permitted.

PART TWO - PRODUCTS - (Not Applicable)

MATERIALS

Existing Materials to be Reused: For those materials to be reused, refer to requirements of Section 01 61 00 - "Materials and Equipment".

PART THREE - EXECUTION

INSPECTION

General: Prior to execution of demolition work, inspect all area that will be removed and areas adjacent. Notify Architect in writing of any detrimental conditions. Do not proceed until all conditions are satisfactory.

PREPARATION

Dust Control: Construct temporary enclosures between occupied areas and areas of demolition Work of all contractors. Seal enclosure tightly and provide sufficient fans to exhaust dust laden air.

Shoring: Provide shoring to support existing structure prior to removal of elements to be demolished or removed.

DEMOLITION

Operations: Conduct Demolition operations and removal of debris, to ensure minimum interference with roads, streets, walks, other adjacent occupied or used areas as follows:

- A. Ensure safe passage of persons around area of demolition. Conduct operations to prevent injury to adjacent buildings, structures, other facilities, and persons.
- B. Accomplish Work with minimum amount of noise and disruption to existing functions.
- C. Plan and protect shoring from being displaced during demolition of adjacent elements.

Salvage: Readily salvageable items not indicated on drawings for relocation, but which Owner may request, shall be salvaged with minimum damage and moved to storage locations on Project site as directed by Owner. These items to remain Owner's property. Remove completely from site all other items indicated on Drawings to be removed.

Debris: Remove as it accumulates in accordance with requirements of Section 01710 - "Cleaning".

* * * * *

End of Section 02 41 19.13

DIVISION 08 SECTION 08 11 17 - MONUMENTAL STILE AND RAIL

DOORS

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Provide aluminum Monumental aluminum stile and rail doors as indicated on Drawings and specified herein.

Glazing: Refer to Section 08800 - "Glass and Glazing" for glazing requirements for aluminum entrances and storefronts, including doors specified herein to be factory preglazed.

RELATED WORK

General: Following items of related work are included in other sections:

- A. Door hardware: Section 08 71 00
- B. Glass and glazing: Section 08 80 00

REFERENCES

General: References as follows:

- A. ASTM B 209 - Aluminum and Aluminum-Alloy Sheet and Plate.
- B. ASTM B 221 - Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- C. ASTM D 6670-01 - Standard Practice for Full-Scale Chamber Determination of Volatile Organic Emissions from Indoor Materials/Products.
- D. ASTM E 84 - Surface Burning Characteristics of Building Materials.
- E. ASTM E 283 - Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.
- F. ASTM E 330 - Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- G. ASTM E 331 - Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.
- H. ASTM E 1886 - Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Storm Shutters Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials.

PERFORMANCE REQUIREMENTS

General: Provide door assemblies that have been designed and fabricated to comply with specified performance requirements, as demonstrated by testing manufacturer's corresponding standard systems.

Air Infiltration: For a single door, test specimen shall be tested in accordance with ASTM E 283 at a pressure differential of 6.24 psf. Door shall not exceed 0.01 cfm per square foot.

Uniform Structural Load: For a single door, test specimen shall be tested in accordance with ASTM E 330. Plus or minus 67.5 pounds per square foot.

Water Resistance: For a single door, test specimen shall be tested in accordance with ASTM E 331 at a pressure differential of 3.75 psf. No leakage.

Large Missile Impact: Single impact. Pass.

Indoor Air Quality Testing per ASTM D 6670-01: GREENGUARD Environmental Institute Certified including GREENGUARD for Children and Schools Certification.

SUBMITTALS

General: Submit in accordance with requirements of Section 01 33 23 - Product Data and Samples.

Product Data: Submit manufacturer's product data, including description of materials, components, fabrication, finishes, and installation.

Shop Drawings: Submit manufacturer's shop drawings, including elevations, sections, and details, indicating dimensions, tolerances, materials, fabrication, doors, panels, framing, hardware schedule, glazing, and finish.

Samples: As follows:

- A. Doors: Submit manufacturer's sample of doors showing stiles, rails, framing, hardware, glazing, and finish.
- B. Color: Submit manufacturer's samples of standard colors of doors and frames.
- C. Manufacturer's Project References: Submit list of successfully completed projects including project name and location, name of architect, and type and quantity of doors manufactured.
- D. Maintenance Manual: Submit manufacturer's maintenance and cleaning instructions for doors, including maintenance and operating instructions for hardware.
- E. Warranty: Submit manufacturer's standard warranty.

SUBSTITUTIONS

General: For products specified herein, Bids shall be based on products named in Project Manual, or on items which has designated as an "approved equal". A product not named in Project Manual or that is not approved ,will only be acceptable when such product meets all other requirements of Project Specifications, including specifications of originally specified products' manufacturer as of date of Contract Documents.

Requests for Substitutions: Requests for Owner's approval of a product as equal will not be considered unless sufficient data for evaluation is received seven (7) days prior to the Bid Opening Date.

Submittals: Submit a separate request for each Product in accordance with requirements of Section 01 62 00 - "Substitutions and Product Options".

Note: Owner's approval of an item for a previous project does not constitute approval for this Project.

QUALITY ASSURANCE

Manufacturer's Qualifications: As follows:

- A. Continuously engaged in manufacturing of doors of similar type to that specified, with a minimum of 25 years successful experience.
- B. Door and frame components from same manufacturer.
- C. Evidence of a compliant documented quality management system.

DELIVERY, STORAGE, AND HANDLING

Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying opening door mark and manufacturer.

Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.

Handling: Protect materials and finish from damage during handling and installation.

WARRANTY

General: Warrant doors, frames, and factory hardware against failure in materials and workmanship, including excessive deflection, faulty operation, defects in hardware installation, and deterioration of finish or construction in excess of normal weathering.

Warranty Period: Ten years starting on date of shipment.

PART TWO - PRODUCTS

MANUFACTURER

General: For purposes of designating type and quality of Work under this Section, Drawings and

Specifications are based on products manufactured by Special-Lite, Inc., PO Box 6, Decatur, Michigan 49045; or approved equal system by Kawneer Company, Inc.; US Aluminum; Efco; or Vistawall.

MONUMENTAL STILE AND RAIL DOORS

Model: SL-15 wide stile monumental aluminum stile and rail doors.

Door Opening Size: As indicated on the Inspections.

Door Thickness: 1-3/4 inches.

Stiles and Rails: As follows:

- A. Material: Aluminum extrusions made from prime-equivalent billet that is produced from 100% reprocessed 6063-T5 alloy recovered from industrial processes, 0.125-inch minimum wall thickness, 1-piece.
- B. Stile Width: 4-1/2 inches.
- C. Rail Width:

1. Top: 6-1/2 inches.
2. Bottom: 10 inches.

Corners: As follows:

- A. True mortise and tenon joints.
- B. Full-width 3/8-inch diameter galvanized steel tie rods secured with locking hex nuts.

Welding of Joints: Not permitted.

Mid Panel: As follows:

1. Model: SL-484.
2. Height: 12 inches.
3. Frame: Aluminum extrusions with extruded spline and interlocking edges to secure face sheets.
4. Core: Poured-in-place urethane, minimum 5 pounds per cubic foot density.
5. Fasten with mortise and tenon joints and two 3/8-inch diameter galvanized steel tie rods with locking hex nuts.

Face Sheet: As follows:

1. Anodized Aluminum: Smooth.

MATERIALS

Aluminum Members: As follows:

- A. Aluminum extrusions made from prime-equivalent billet that is produced from 100% reprocessed 6063-T5 alloy recovered from industrial processes: ASTM B 221.
- B. Sheet and Plate: ASTM B 209.
- C. Wall Thickness: 0.125 inch.
- D. Alloy and Temper: As required by manufacturer for strength, corrosion resistance, application of required finish, and control of color.

Fasteners: As follows:

- A. Material: Aluminum, 18-8 stainless steel, or other noncorrosive metal.
- B. Compatibility: Compatible with items to be fastened.
- C. Exposed Fasteners: Oval Phillips head screws with finish matching items to be fastened.

FABRICATION

Sizes and Profiles: Required sizes for door and frame units and profile requirements shall be as indicated on your inspection.

Coordination of Fabrication: Field measure before fabrication and show recorded measurements on shop drawings.

Assembly: Complete cutting, fitting, forming, drilling, and grinding of metal before assembly. Remove burrs from cut edges.

Welding: Welding of doors or frames is not acceptable.

Fit: Maintain continuity of line and accurate relation of planes and angles. Secure attachments and support at mechanical joints with hairline fit at contacting members.

ALUMINUM DOOR FRAMING SYSTEMS

Tubular Framing: As follows:

- A. Size and Type: As indicated on the Drawings.
- B. Materials: Aluminum extrusions made from prime-equivalent billet that is produced from 100% reprocessed 6063-T5 alloy recovered from industrial processes, 0.125-inch minimum wall thickness.
- C. Applied Door Stops: 0.625-inch high, with screws and weatherstripping. Door stop shall incorporate pressure gasketing for weathering seal. Counterpunch fastener holes in door stop to preserve full metal thickness under fastener head.
- D. Frame Members: Box type with 4 enclosed sides. Open-back framing is not acceptable.
- E. Caulking: Caulk joints before assembling frame members.
- F. Joints:
 - 1. Secure joints with fasteners.
 - 2. Provide hairline butt joint appearance.
- G. Field Fabrication: Field fabrication of framing using stick material is not acceptable.
- H. Applied Stops: For side, transom, and borrowed lites and panels. Applied stops shall incorporate pressure gasketing for weathering seal. Reinforce with solid bar stock fill for frame hardware attachments.
- I. Hardware:
 - a. Premachine and reinforce frame members for hardware in accordance with manufacturer's standards and hardware schedule.
 - b. Factory install hardware.
- J. Anchors:
 - 1. Anchors appropriate for wall conditions to anchor framing to wall materials.
 - 2. Door jamb and header mounting holes shall be spaced no more than 24 inches apart.
 - 3. Secure head and sill members of transom, side lites, and similar conditions.
- K. Side Lites:
 - 1. Factory preassemble side lites to greatest extent possible.
 - 2. Mark frame assemblies according to location.

Insert Framing System: As follows:

- A. Model: SL-1032 Series.
- B. Insert frame as needed, using integral stop fitted with weatherstripping.
- C. Corner joints of miter design, secure with furnished aluminum clips, and screw into place.
- D. Hardware:
 - 1. Premachine and reinforce insert frame members for hardware in accordance with manufacturer's standards and hardware schedule.
 - 2. Factory install hardware.
- E. Anchors:
 - 1. Anchors of suitable type to fasten insert framing to existing frame materials.
 - 2. Minimum of 5 anchors on jambs up to 7'-4" height, 3 anchors on headers, and 1 additional anchor on jambs for each additional foot of frame.

Frame Capping: As follows:

1. Model: SL-70.
2. Extruded Capping: With insert frame as indicated on the Drawings.
3. Finish: Match framing.

HARDWARE

General: Pre-machine doors in accordance with templates from specified hardware manufacturers and hardware schedule.

Hardware Installation: Factory installed hardware.

Hardware Schedule: As specified in Section 08 71 00.

Hardware Finish: As specified in Section 08 71 00

GLAZING

Glazing: 3/8 inch Clear Tempered and follows:

- A. Design glazing system for replacement of glass.
- B. Manufacturer's standard flush glazing system of recessed channels and captive glazing gaskets or applied stops as indicated on the Drawings.
- C. Allow for thermal expansion on exterior units.

ALUMINUM FINISHES

Anodized Finish: Class I finish, 0.7 mils thick.

- A. Clear 215 R1, AA-M10C12C22A41.
- B. Dark Bronze, AA-M10C12C22A44.

PART THREE - EXECUTION

EXAMINATION

General: Examine areas to receive doors. Notify Architect of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.

PREPARATION

General Preparation: Ensure openings to receive frames are plumb, level, square, and in tolerance.

INSTALLATION

General Installation: As follows:

- A. Install doors in accordance with manufacturer's instructions.
- B. Install doors plumb, level, square, true to line, and without warp or rack.
- C. Anchor frames securely in place.
- D. Separate aluminum from other metal surfaces with bituminous coatings or other means approved by Owner.
- E. Set thresholds in bed of mastic and backseal.

- F. Install exterior doors to be weathertight in closed position.
- G. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Owner.
- H. Remove and replace damaged components that cannot be successfully repaired as determined by Owner.

FIELD QUALITY CONTROL

Manufacturer's Field Services: Manufacturer's representative shall provide technical assistance and guidance for installation of doors.

ADJUSTING

General: Adjust doors, hinges, and locksets for smooth operation without binding.

CLEANING

General: Clean doors promptly after installation in accordance with manufacturer's instructions.

Note: Do not use harsh cleaning materials or methods that would damage finish.

PROTECTION

General: Protect installed doors to ensure that, except for normal weathering, doors will be without damage or deterioration at time of substantial completion.

* * * * *

End of Section 08 11 17

DIVISION 08 SECTION 08 17 43 - INTEGRATED COMPOSITE DOOR ASSEMBLIES

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Provide fiberglass reinforced polyester (FRP) flush doors with aluminum frames as indicated on specified herein.

Glazing: Refer to Section 08800 - "Glass and Glazing" for glazing requirements for aluminum entrances and storefronts, including doors specified herein to be factory preglazed.

RELATED WORK

General: Following items of related work are included in other sections:

- A. Door hardware: Sections 08 71 00
- B. Glass and glazing: Section 08 80 00

REFERENCES

General References: As follows:

- A. AAMA 1503-98 - Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections.
- B. ANSI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcings.
- C. ASTM B 117 - Operating Salt Spray (Fog) Apparatus.
- D. ASTM B 209 - Aluminum and Aluminum-Alloy Sheet and Plate.
- E. ASTM B 221 - Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- F. ASTM D 256 - Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
- G. ASTM D 543 - Evaluating the Resistance of Plastics to Chemical Reagents.
- H. ASTM D 570 - Water Absorption of Plastics.
- I. ASTM D 638 - Tensile Properties of Plastics.
- J. ASTM D 790 - Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- K. ASTM D 1308 - Effect of Household Chemicals on Clear and Pigmented Organic Finishes.
- L. ASTM D 1621 - Compressive Properties of Rigid Cellular Plastics.
- M. ASTM D 1623 - Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics.
- N. ASTM D 2126 - Response of Rigid Cellular Plastics to Thermal and Humid Aging.
- O. ASTM D 2583 - Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.
- P. ASTM D 5420 - Impact Resistance of Flat Rigid Plastic Specimens by Means of a Falling

Weight.

Q. ASTM D 6670-01 - Standard Practice for Full-Scale Chamber Determination of Volatile Organic Emissions from Indoor Materials/Products.

R. ASTM E 84 - Surface Burning Characteristics of Building Materials.

S. ASTM E 90 - Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.

T. ASTM E 283 - Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.

U. ASTM E 330 - Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

V. ASTM E 331 - Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.

W. ASTM F 476 - Security of Swinging Door Assemblies.

X. NWWDA T.M. 7-90 – Cycle Slam Test Method

Y. SFBC PA 201 - Impact Test Procedures.

Z. SFBC PA 203 - Criteria for Testing Products Subject to Cyclic Wind Pressure Loading.

AA. SFBC 3603.2 (b)(5) - Forced Entry Resistance Test.

PERFORMANCE REQUIREMENTS

General: Provide door assemblies that have been designed and fabricated to comply with specified performance requirements, as demonstrated by testing manufacturer's corresponding standard systems.

Air Infiltration: For a single door 3'-0" x 7'-0", test specimen shall be tested in accordance with ASTM E 283 at pressure differential of 6.24 psf. Door shall not exceed 0.90 cfm per linear foot of perimeter crack.

Water Resistance: For a single door 3'-0" x 7'-0", test specimen shall be tested in accordance with ASTM E 331 at pressure differential of 7.50 psf. Door shall not have water leakage.

Indoor Air Quality Testing per ASTM D 6670-01: GREENGUARD Environmental Institute Certified including GREENGUARD for Children and Schools Certification.

Hurricane Test Standards, Single Door with Single-Point Latching: As follows:

- A. Uniform Static Load, ASTM E 330: Plus or minus 75 pounds per square foot.
- B. Forced Entry Test, 300 Pound Load Applied, SFBC 3603.2 (b)(5): Passed.
- C. Cyclic Load Test, SFBC PA 203: Plus or minus 53 pounds per square foot.
- D. Large Missile Impact Test, SFBC PA 201: Passed.

Swinging Door Cycle Test, Doors and Frames, ANSI A250.4: Minimum of 25,000,000 cycles.

Cycle Slam Test Method, NWWDA T.M. 7-90: Minimum 5,000,000 Cycles.

Swinging Security Door Assembly, Doors and Frames, ASTM F 476: Grade 40.

Salt Spray, Exterior Doors and Frames, ASTM B 117: Minimum of 500 hours.

Sound Transmission, Exterior Doors, STC, ASTM E 90: Minimum of 25.

Thermal Transmission, Exterior Doors, U-Value, AAMA 1503-98: Maximum of 0.29 BTU/hr x sf x degrees F. Minimum of 55 CRF value.

Surface Burning Characteristics, FRP Doors and Panels, ASTM E 84: As follows:

- A. Flame Spread: Maximum of 200, Class C.
- B. Smoke Developed: Maximum of 450, Class C.

Surface Burning Characteristics: Class A Option On Interior Faces of FRP Exterior Panels and Both Faces of FRP Interior Panels, ASTM E 84:

- A. Flame Spread: Maximum of 25.
- B. Smoke Developed: Maximum of 450.

Impact Strength, FRP Doors and Panels, Nominal Value, ASTM D 256: 15.0 foot-pounds per inch of notch.

Tensile Strength, FRP Doors and Panels, Nominal Value, ASTM D 638: 14,000 psi.

Flexural Strength, FRP Doors and Panels, Nominal Value, ASTM D 790: 21,000 psi.

Water Absorption, FRP Doors and Panels, Nominal Value, ASTM D 570: 0.20 percent after 24 hours.

Indentation Hardness, FRP Doors and Panels, Nominal Value, ASTM D 2583: 55.

Gardner Impact Strength, FRP Doors and Panels, Nominal Value, ASTM D 5420: 120 in-lb.

Abrasion Resistance: Face Sheet, Taber Abrasion Test, 25 Cycles at 1,000 Gram Weight with CS-17 Wheel: Maximum of 0.029 average weight loss percentage.

Stain Resistance, ASTM D 1308: Face sheet unaffected after exposure to red cabbage, tea, and tomato acid. Stain removed easily with mild abrasive or FRP cleaner when exposed to crayon and crankcase oil.

Chemical Resistance, ASTM D 543: Excellent rating.

- A. Acetic acid, Concentrated.
- B. Ammonium Hydroxide, Concentrated.
- C. Citric Acid, 10%.
- D. Formaldehyde.
- E. Hydrochloric Acid, 10%
- F. Sodium hypochlorite, 4 to 6 percent solution.

Compressive Strength, Foam Core, Nominal Value, ASTM D 1621: 79.9 psi.

Compressive Modulus, Foam Core, Nominal Value, ASTM D 1621: 370 psi.

Tensile Adhesion, Foam Core, Nominal Value, ASTM D 1623: 45.3 psi.

Thermal and Humid Aging: Foam Core, Nominal Value, 158 Degrees F and 100 Percent Humidity for 14 Days, ASTM D 2126: Minus 5.14 percent volume change.

SUBMITTALS

General: Submit in accordance with requirements of Section 01 33 23 - "Shop Drawings, Product Data and Samples".

Product Data: Submit manufacturer's product data, including description of materials, components, fabrication, finishes, and installation.

Shop Drawings: Submit manufacturer's shop drawings, including elevations, sections, and details, indicating dimensions, tolerances, materials, fabrication, doors, panels, framing, hardware schedule, and finish.

Samples: As follows:

- A. Door: Submit manufacturer's sample of door showing face sheets, core, framing, and finish.
- B. Color: Submit manufacturer's samples of standard colors of doors and frames.

Test Reports: Submit certified test reports from qualified independent testing agency indicating doors comply with specified performance requirements.

Manufacturer's Project References: Submit list of successfully completed projects including project name and location, name of architect, and type and quantity of doors manufactured.

Maintenance Manual: Submit manufacturer's maintenance and cleaning instructions for doors, including maintenance and operating instructions for hardware.

Warranty: Submit manufacturer's standard warranty.

SUBSTITUTIONS

General: For products specified herein, Bids shall be based on products named in Project Manual, or on items which has designated as an "approved equal". A product not named in Project Manual or that is not approved by Owner will only be acceptable when such product meets all other requirements of Project Specifications, including specifications of originally specified products' manufacturer as of date of Contract Documents.

Requests for Substitutions: Requests for Owner's approval of a product as equal will not be considered unless sufficient data for evaluation is received by Architect seven (7) days prior to the Bid Opening Date.

Submittals: Submit a separate request for each Product in accordance with requirements of Section 01 62 00 - "Substitutions and Product Options".

Note: Owner's approval of an item for a previous project does not constitute approval for this Project.

QUALITY ASSURANCE

Manufacturer's Qualifications:

- A. Continuously engaged in manufacturing of doors of similar type to that specified, with a minimum of 25 years successful experience.
- B. Door and frame components from same manufacturer.
- C. Evidence of a compliant documented quality management system.

DELIVERY, STORAGE, AND HANDLING

Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying opening door mark and manufacturer.

Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.

Handling: Protect materials and finish from damage during handling and installation.

WARRANTY

General: Warrant doors, frames, and factory hardware against failure in materials and workmanship, including excessive deflection, faulty operation, defects in hardware installation, and deterioration of finish or construction in excess of normal weathering.

Warranty Period: Ten years starting on date of shipment. In addition, a limited lifetime (while the door is in its specified application in its original installation) warranty covering: failure of corner joinery, core deterioration, delamination or bubbling of door skin.

PART TWO - PRODUCTS**MANUFACTURER**

A. Special-Lite, Inc., PO Box 6, Decatur, Michigan 49045. Toll Free (800) 821-6531. Phone (269) 423-7068. Fax (800) 423-7610. Web Site www.special-lite.com. E-Mail info@speciallite.com.

FRP FLUSH DOORS

Model: SL-17 Flush Doors with SpecLite3 fiberglass reinforced polyester (FRP) face sheets.

Door Opening Size: As indicated in specifications and inspections.

Construction: As follows:

- A. Door Thickness: 1-3/4 inches.
- B. Stiles and Rails: Aluminum extrusions made from prime-equivalent billet that is produced from 100% reprocessed 6063-T5 alloy recovered from industrial processes, minimum of 2- 5/16-inch depth.
- C. Corners: Mitered.
- D. Provide joinery of 3/8-inch diameter full-width tie rods through extruded splines top and bottom integral to standard tubular shaped stiles and rails reinforced to accept hardware as specified.
- E. Securing Internal Door Extrusions: 3/16-inch angle blocks and locking hex nuts for joinery. Welds, glue, or other methods are not acceptable.
- F. Furnish extruded stiles and rails with integral reglets to accept face sheets. Lock face sheets into place to permit flush appearance.
- G. Rail caps or other face sheet capture methods are not acceptable.
- H. Extrude top and bottom rail legs for interlocking continuous weather bar.

- I. Meeting Stiles: Pile brush weatherseals. Extrude meeting stile to include integral pocket to accept pile brush weatherseals.
- J Bottom of Door: Install bottom weather bar with nylon brush weatherstripping into extruded interlocking edge of bottom rail.
- K. Glue: Use of glue to bond sheet to core or extrusions is not acceptable.

Face Sheet: As follows:

- A. Material: SpecLite3 FRP, 0.120-inch thickness, finish color throughout.
- B. Protective Coating: Abuse-resistant engineered surface. Provide FRP with SpecLite3 protective coating, or equal.
- C. Texture: Pebble.
- D. Color: Match existing frame color.
- E. Adhesion: The use of glue to bond face sheet to foam core is prohibited.

Core: As follows:

- A. Material: Poured-in-place polyurethane foam.
- B. Density: Minimum of 5 pounds per cubic foot.
- C. R-Value: Minimum of 9.

Cutouts: As follows:

- A. Manufacture doors with cutouts for required vision lites, louvers, and panels.
- B. Factory install vision lites, louvers, and panels.

Hardware: As follows:

- A. Premachine doors in accordance with templates from specified hardware manufacturers and hardware schedule.
- B. Factory installed hardware.

MATERIALS

Aluminum Members: As follows:

- A. Aluminum extrusions made from prime-equivalent billet that is produced from 100% reprocessed 6063-T5 alloy recovered from industrial processes: ASTM B 221.
- B. Sheet and Plate: ASTM B 209.
- C. Alloy and Temper: As required by manufacturer for strength, corrosion resistance, application of required finish, and control of color.

Components: Door and frame components from same manufacturer.

Fasteners: As follows:

- A. Material: Aluminum, 18-8 stainless steel, or other noncorrosive metal.
- B. Compatibility: Compatible with items to be fastened.
- C. Exposed Fasteners: Screws with finish matching items to be fastened.

FABRICATION

Sizes and Profiles: Required sizes for door and frame units, and profile requirements shall be as indicated in field inspections.

Coordination of Fabrication: Field measure before fabrication and show recorded measurements on shop drawings.

Assembly: As follows:

- A. Complete cutting, fitting, forming, drilling, and grinding of metal before assembly.
- B. Remove burrs from cut edges.

Welding: Welding of doors or frames is not acceptable.

Fit: As follows:

- A. Maintain continuity of line and accurate relation of planes and angles.
- B. Secure attachments and support at mechanical joints with hairline fit at contacting members.

ALUMINUM DOOR FRAMING SYSTEMS

Tubular Framing: As follows:

- A. Size and Type: As indicated on the Drawings.
- B. Materials: Aluminum extrusions made from prime-equivalent billet that is produced from 100% reprocessed 6063-T5 alloy recovered from industrial processes, 1/8-inch minimum wall thickness.
- C. Applied Door Stops: 0.625-inch high, with screws and weatherstripping. Door stop shall incorporate pressure gasketing for weathering seal. Counterpunch fastener holes in door stop to preserve full metal thickness under fastener head.
- D. Frame Members: Box type with 4 enclosed sides. Open-back framing is not acceptable.
- E. Caulking: Caulk joints before assembling frame members.
- F. Joints:
- G. Secure joints with fasteners.
- H. Provide hairline butt joint appearance.
- I. Field Fabrication: Field fabrication of framing using stick material is not acceptable.
- J. Applied Stops: For side, transom, and borrowed lites and panels. Applied stops shall incorporate pressure gasketing for weathering seal. Reinforce with solid bar stock fill for frame hardware attachments.
- K. Hardware:
 - 1. Premachine and reinforce frame members for hardware in accordance with manufacturer's standards and hardware schedule.
 - 2. Factory install hardware.
- L. Anchors:
 - 1. Anchors appropriate for wall conditions to anchor framing to wall materials.
 - 2. Door Jamb and Header Mounting Holes: Maximum of 24-inch centers.
 - 3. Secure head and sill members of transom, side lites, and similar conditions.
- M. Side Lites:
 - 1. Factory preassemble side lites to greatest extent possible.
 - 2. Mark frame assemblies according to location.

Insert Framing System: As follows:

- A. Model: SL-1032 Series.
- B. Insert frame as indicated on the Drawings, using integral stop fitted with weatherstripping.
- C. Corner joints of miter design, secure with furnished aluminum clips, and screw into place.
- F. Hardware:

1. Premachine and reinforce insert frame members for hardware in accordance with manufacturer's standards and hardware schedule.
 2. Factory install hardware.
- G. Anchors:
1. Anchors of suitable type to fasten insert framing to existing frame materials.
 2. Minimum of 5 anchors on jambs up to 7'-4" height, 3 anchors on headers, and 1 additional anchor for each additional foot of frame.

Frame Capping: As follows:

- A. Model: SL-70.
- B. Capping: With insert frame as indicated on the Drawings.
- C. Finish: Match framing.

HARDWARE

Hardware Preparation: Pre-machine doors in accordance with templates from specified hardware manufacturers and hardware schedule.

Factory install hardware: As follows:

Hardware Schedule: As specified in Section 08 71 00

Hardware Finish: As specified in Section 08 71 00.

VISION LITES

Glazing: 3/8-inch glass.

Lites in Exterior Doors: Allow for thermal expansion.

Rectangular Lites: As follows:

1. Size: [As indicated in field inspections].
2. Factory glazed with screw-applied aluminum stops anodized to match perimeter door rails.

LOUVERS

Type: Aluminum, inverted Y-type, fixed blade, 12 inches minimum from bottom of door.

Size: As indicated on the Drawings.

Installation: Factory installed into standard vision lite kit. Exterior side of louver shall be free of fasteners.

Note: Provide insect screen.

PART THREE - EXECUTION

EXAMINATION

General: Examine areas to receive doors. Notify Architect of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.

PREPARATION

General: Ensure openings to receive frames are plumb, level, square, and in tolerance.

INSTALLATION

General: Install Integrated Composite Door Assemblies in accordance with manufacturers printed instructions and as follows:

- A. Install doors in accordance with manufacturer's instructions.
- B. Install doors plumb, level, square, true to line, and without warp or rack.
- C. Anchor frames securely in place.
- D. Separate aluminum from other metal surfaces with bituminous coatings or other means approved.
- E. Set thresholds in bed of mastic and backseal.
- F. Install exterior doors to be weathertight in closed position.
- G. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- H. Remove and replace damaged components that cannot be successfully repaired as determined by Architect.

FIELD QUALITY CONTROL

Manufacturer's Field Services: Manufacturer's representative shall provide technical assistance and guidance for installation of doors.

ADJUSTING

General: Adjust doors, hinges, and locksets for smooth operation without binding.

CLEANING

General: Clean doors promptly after installation in accordance with manufacturer's instructions.

Note: Do not use harsh cleaning materials or methods that would damage finish.

PROTECTION

General: Protect installed doors to ensure that, except for normal weathering, doors will be without damage or deterioration at time of substantial completion.

* * * * *

End of Section 08 17 43

DIVISION 08 SECTION 08 80 00 - GLAZING

PART ONE - GENERAL

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Provide glass and glazing as indicated on Drawings and specified herein.

Definitions: "Glass" includes prime glass, processed glass, and fabricated glass products. "Glazing" includes glass installation and materials used to install glass.

Note: "Glass products" is hereby defined to include glazing plastics.

Types: Work of this Section include glass and glazing for:
A. Window units, not indicated as "preglazed".
B. Entrances and other doors not indicated as "preglazed".

RELATED WORK

General: Following items of related work are included in other sections:
A. Joint sealants: Section 07 92 00
B. Aluminum entrances: Section 08 11 17

QUALITY ASSURANCE

Prime Glass Standard: FS DD-G-451

Heated-Treated Glass Standard: FS DD-G-1403

Safety Glass Standard: CPSC 16 CRF 1201

REFERENCE

Glazing Specifications: "Glazing Manual" by Flat Glass Marketing Association.

SUBMITTALS

General: Submit in accordance with requirements of Section 01 33 23 - "Shop Drawings, Product Data and Samples".

Product Data: Submit manufacturer's specifications for products and installation, including data substantiating that products comply with requirements.

SUBSTITUTIONS

General: For products specified herein, Bids shall be based on products named in Project Manual, or on items which Owner has designated as an "approved equal". A product not named in Project Manual or that is not approved by Owner will only be acceptable when such product meets all other requirements of Project Specifications, including specifications of originally specified products' manufacturer as of date of Contract Documents.

Requests for Substitutions: Requests for Owner approval of a product as equal will not be considered unless sufficient data for evaluation is received by Architect seven (7) days prior to the Bid Opening Date.

Submittals: Submit a separate request for each Product in accordance with requirements of Section 01 62 00 - "Substitutions and Product Options".

Note: Owner's approval of an item for a previous project does not constitute approval for this Project.

PART TWO - PRODUCTS

ACCEPTABLE MANUFACTURERS

General: Provide glass by one of following: Viracon; Libbey-Owens-Ford Company; or approved equal.

PROCESSED TEMPERED GLASS

General: Provide glass of color and type indicated, which has been heat treated to strengthen glass in bending to not less than 4.5 times annealed strength.

Tong Marks: Provide tempered glass produced by manufacturer's special process which eliminates tong marks.

Tempered Clear Float/Plate Glass: Type I, Quality q3, as follows:

A. Thickness: 3/8 inch.

1. Use: Aluminum entrance and fiberglass composite door units.

GLAZING SEALANTS AND COMPONENTS

General: Provide color of exposed sealant/compound indicated or if not otherwise indicated, as selected by Architect from manufacturer's standard colors, or black if no color is so selected. Comply with manufacturer's recommendations for selection of hardness, depending upon location of each application, conditions at time of installation, and performance requirements as indicated. Select materials, and variations or modifications, carefully for compatibility with surfaces contacted in installation.

Two-Part Polysulfide Glazing Sealant: Elastomeric polysulfide sealant complying with FS TT-S-227, Class A, Type 2; specially compounded and tested to show a minimum of 20 years resistance to deterioration in normal glazing applications.

One-Part Silicone Rubber Glazing Sealant: Elastomeric silicone sealant complying with FS TTS-001543, Class A, non-sag. Provide acid type recommended by manufacturer where only nonporous bond surfaces are contacted; provide non-acid type recommended where one or more porous bond surfaces are contacted.

Acrylic-Emulsion Glazing Sealant: Emulsion of acrylic, with or without latex rubber modification; compounded specifically for glazing; nonhardening, nonstaining and nonbleeding. Use only for interior glazing.

GLAZING GASKETS

Polyvinyl Chloride Glazing Gaskets: Extruded, flexible PVC gaskets of the profile and hardness shown, or as required for watertight construction; comply with ASTM D-2287.

Vinyl Foam Glazing Tape: Closed cell, flexible, self-adhesive, non-extruding, polyvinyl chloride foam tape; recommended by manufacturer for exterior, exposed, watertight installation of glass, with only nominal pressure in the glazing channel; comply with ASTM D-1667.

MISCELLANEOUS GLAZING MATERIALS

Cleaners, Primers and Sealers: Type recommended by sealant or gasket manufacturer.

Setting Blocks: Neoprene or EPDM, 70-90 durometer hardness with proven compatibility with sealants used.

Compressible Filler (Rod): Closed-cell or waterproof-jacketed rod stock of synthetic rubber or plastic foam, proven to be compatible with sealants used, flexible and resilient, with 5-10 psi compression strength for 25% deflection.

PART THREE - EXECUTION

INSPECTION

General: Prior to installation of glass and glazing, examine all conditions, notify Contractor and Owner in writing of any detrimental conditions. Do not proceed until all conditions are satisfactory.

STANDARDS AND PERFORMANCE

Note: Watertight and airtight installation of each glass product is required, except as otherwise shown. Each installation must withstand normal temperature changes, wind loading, impact loading (for operating sash and doors), without failure including loss or breakage of glass, failure of sealants or gaskets to remain watertight and airtight, deterioration of glazing materials and other defects in work.

Handling of Glass: Protect glass from edge damage during handling and installation, and subsequent operation of glazed components of work. During installation, discard units with significant edge damage or other imperfections.

Dimensions: Glazing channel dimensions as shown are intended to provide for necessary bite on glass, minimum edge clearance, and adequate sealant thicknesses, with reasonable tolerances.

Adjust as required by job conditions at time of installation.

Glass Installation: Comply with combined recommendations and technical reports by manufacturers of glass and glazing products as used in each glazing channel, and with recommendations at Flat Glass Marketing Association "Glazing Manual", except where more stringent requirements are indicated.

PREPARATION

Cleaning: Clean glazing channel and other framing members to receive glass, immediately before glazing. Remove coatings which are not firmly bonded to substrate. Remove lacquer from metal surfaces where elastomeric sealants are used.

Primer and Sealants: Apply primer and sealant to joint surfaces where recommended by sealant manufacturer.

INSTALLATION

Setting Blocks: Install setting blocks of proper size in sill rabbet, located 1/4 of glass width from each corner. Set blocks in thin course of heel-bead compound (if any).

Spacers: Provide spacers inside and out, of proper size and spacing, for glass sizes larger than 50 united inches, except where gaskets or preshimmed tapes are used for glazing. Provide 1/8 inch minimum bite of spacers on glass and use thickness slightly less than final compressed thickness of tape.

Note: Set units of glass in each series with uniformity of pattern, draw, bow and similar characteristics.

Filler Rods: Prevent exudation of sealant or compound by forming voids or installing filler rods in channel at heel of jambs and head (do not leave voids in sill channels), except as otherwise indicated and depending on light size, thickness and type of glass, and complying with manufacturer's recommendations.

Sealants: Force sealants into channel to eliminate voids and to ensure complete "wetting" or bond of sealant to glass and channel.

Tooling of Sealants: Tool exposed surfaces of glazing liquids and compounds to provide a substantial "wash" away from glass. Install pressurized tapes and gaskets to protrude slightly out of channel, so as to eliminate dirt and moisture pockets. Clean and trim excess glazing materials from glass and stops or frames promptly after installation, and eliminate stains and discolorations.

Gaskets: Where wedge-shaped gaskets are driven into one side of channel to pressurize sealant or gasket on opposite side, provide adequate anchorage to ensure that gasket will not "walk" out when installation is subjected to movement. Anchor gasket to stop with matching ribs, or by proven adhesives, including embedment of gasket tail in cured heel bead.

Gasket Glazing: Miter cut and bond ends together at corners where gaskets are used for channel glazing, so that gaskets will not pull away from corners and result in voids or leaks in glazing system.

ADJUSTMENT AND CLEANING

Damaged Units: Remove and replace glass which is broken, chipped, cracked, abraded or damaged in other ways during construction period, including natural causes, accidents and vandalism.

Cleaning: Wash and polish glass on both faces not more than four days prior to date scheduled for inspections intended to establish date of substantial completion in each area of Project. Comply with glass product manufacturer's recommendations for final cleaning.

PROTECTION

General: Protect exterior glass from breakage immediately upon installation, by use of crossed streamers attached to framing and held away from glass. Do not apply markers to surfaces of glass. Remove nonpermanent labels and clean surfaces. Cure sealants for high early strength and durability.

* * * * *

End of Section 08 80 00